

**HUNTERS POINT SHIPYARD**  
**RESTORATION ADVISORY BOARD MEETING MINUTES**  
**26 AUGUST 2004**

These minutes summarize the discussions and presentations from the Restoration Advisory Board (RAB) meeting held from 6:12 p.m. to 8:10 p.m. on Thursday, 26 August 2004, at Building 101 at Hunters Point Shipyard (HPS). A verbatim transcript was also prepared for the meeting and is available in the Information Repository for HPS and on the internet at [www.efdswww.navfac.navy.mil/Environmental/HuntersPoint.htm](http://www.efdswww.navfac.navy.mil/Environmental/HuntersPoint.htm). The list of agenda topics is provided below. Attachment A provides a list of attendees, and Attachment B includes action items that were requested and/or committed to by RAB members during the meeting.

**AGENDA TOPICS:**

- 1) Welcome/Introductions/Agenda Review
- 2) Approval of Meeting Minutes from 22 July 2004 RAB Meeting
- 3) Navy Announcements
- 4) Community Co-chair Report/Other Announcements
- 5) Update on the HPS Radiological Program
- 6) Subcommittee Reports
- 7) Community Comment Period
- 8) Adjournment

**MEETING HANDOUTS:**

- Agenda for 26 August 2004 RAB Meeting
- Meeting Minutes from 22 July 2004 RAB Meeting
  - Includes Action Items from 22 July 2004 RAB Meeting
  - Includes Table 1, RAB Roll-Call Sheet
- Monthly Progress Report, July 2004
- PowerPoint Presentation, Naval Sea Systems Command (NAVSEA) Hunters Point Shipyard, Historical Radiological Assessment (HRA) Update, 26 August 2004
- Meeting Minutes, HPS RAB, Membership/Bylaws & Community Outreach Subcommittee, 11 August 2004
- Meeting Minutes, HPS RAB, Lowman Radiological Subcommittee, 21 July 2004
- Meeting Minutes, HPS RAB, Technical Review Subcommittee, 18 August 2004
- Handout, HPS RAB, Draft Proposed Bylaws

**Welcome / Introductions / Agenda and Meeting Minutes Review**

Robert Surber, facilitator, called the meeting to order at 6:12 p.m. Mr. Surber stated that he would be filling in for Marsha Pendergrass that evening. All attendees then made self-introductions. Mr. Surber asked if there were any changes to the agenda. Barbara Bushnell, RAB member, stated that it was her understanding that the subcommittee reports would take place during the first part of the meeting and asked if this was correct. Keith Forman, RAB Co-Chair, responded that the schedule is flexible and that Ms. Pendergrass had previously recommended moving the order of subcommittee reports.

Mr. Surber solicited comments on the 22 July 2004 RAB meeting minutes. Georgia Oliva, RAB member, commented that as stated in the July 2004 meeting minutes, she had requested the Building 322 survey report. During the July 2004 RAB meeting, Pat Brooks, Navy Remedial

1 Project Manager (RPM), had stated that he would provide a copy of this report; however, Ms.  
2 Oliva had not yet received it. Mr. Forman agreed to follow up with Mr. Brooks on this action  
3 item.

4 Jesse Mason, RAB member, inquired about the availability of the Economic Subcommittee  
5 meeting minutes from August 2004. Carolyn Hunter, SulTech, agreed to distribute hard copies  
6 of the Economic Subcommittee meeting minutes to the RAB. Lea Loizos, RAB member, made a  
7 clarification to the July 2004 RAB meeting minutes. Ms. Loizos stated that the Technical  
8 Review Subcommittee was considering having the Navy give a preview of future RAB meeting  
9 technical presentations during Technical Review Subcommittee meetings. Mr. Surber called for  
10 a motion for the RAB to approve the meeting minutes. The RAB approved the 22 July 2004  
11 meeting minutes. .

12 Mr. Surber reviewed the action items contained in the July 2004 meeting minutes and asked for  
13 the status of each item. The first item regarding the AMC cranes at Dry Dock 4 was carried over  
14 to the August 2004 action item table. The second item regarding potential storage bunkers was  
15 carried over to the August 2004 action item table. Maurice Campbell, RAB Co-Chair, stated that  
16 he had located one part of a two-part videotape. When the second part is located, he will make  
17 the information available to the Navy. Mr. Mason commented that several years before, Teresa  
18 Coleman, community member, had mentioned a hill with a potential bunker. Mr. Forman asked  
19 Mr. Mason to coordinate with Mr. Campbell regarding providing the Navy with this information.  
20 Mr. Campbell mentioned that he and Raymond Tompkins, RAB member, had previously  
21 investigated a 3-foot aboveground structure, possibly a ventilation shaft, filled with rocks. Mr.  
22 Campbell would provide this information to the Navy also.

23 The third action item regarding the field trip to view the zero-valent iron (ZVI) site was carried  
24 over to the August 2004 action item table. Ms. Loizos stated that she was coordinating the field  
25 trip with Ryan Ahlersmeyer, Navy RPM. The field trip was tentatively scheduled for the week  
26 of 13 September 2004. Ms. Loizos asked for a show of hands to indicate interest in attending the  
27 ZVI field trip. Seven people indicated that they would be interested in attending the field trip on  
28 a weekday. Three people indicated that they would like to attend but were unable to attend a  
29 weekday trip. Mr. Forman stated that a smaller group was preferable for viewing purposes and  
30 that a second field trip could be planned if necessary. A sign-up sheet was passed around to  
31 solicit interest in the ZVI field trip. Once a tentative date is scheduled, Ms. Loizos will contact  
32 those who signed up to attend the ZVI field trip.

33 The action item regarding the provision of local background levels of radiation by the U.S.  
34 Environmental Protection Agency (USEPA) will be carried over to the August 2004 action item  
35 table. Michael Work, USEPA, stated that his main technical support person, Steve Dean, has  
36 been out of the office most of the past month. The next two action items regarding the return of  
37 the map index to Building 101 and the mailing of the proposed membership bylaws to RAB  
38 members were completed to the satisfaction of the RAB.

39 The next action item was for the Navy to provide the "Draft Final Parcel A Finding of Suitability  
40 to Transfer (FOST), Revision 3," to interested RAB members. Copies of this report were sent to  
41 three RAB members. In addition, Keith Tisdell requested a copy.

42 The final action item regarding the feasibility of providing the Anna E. Waden library with HPS  
43 documents on compact disc files was completed to the satisfaction of the RAB.

#### 44 **Navy and Community Co-Chair Reports/Other Announcements**

45 Mr. Forman stated that although the RAB meeting will likely return to Dago Mary's Restaurant  
46 next month, he would inform the RAB as soon as possible if the venue is unavailable. Mr.

1 Forman recommended that RAB members think about potential alternative meeting locations in  
2 case Dago Mary's Restaurant is unavailable in the future.

3 Mr. Campbell thanked Ahimsa Sumchai, RAB member, for taking action when she saw a man  
4 lying on the sidewalk on a recent evening and saving his life. Mr. Campbell also encouraged  
5 members to participate in the subcommittee meetings.

6 **Reminder: The next RAB meeting will be held from 6:00 to 8:00 p.m., Thursday evening,**  
7 **23 September 2004, at Dago Mary's Restaurant, Building 916 at HPS.**

8  
9 **\*\* Due to delays in transfer of the ownership and scheduled renovations at Dago Mary's,**  
10 **the HPS monthly RAB meeting must be moved. The September 23, 2004 RAB meeting will**  
11 **be held in Building 101 on HPS.**

### 12 **Update on the HPS Radiological Program**

13 Laurie Lowman, Navy Radiological Affairs Support Office (RASO), stated she would provide an  
14 update on the HRA program. Ms. Lowman stated the responses to comments on the draft final  
15 HRA report were distributed on 27 July 2004. Ms. Lowman only received one comment back on  
16 the responses. The comment was from USEPA and has been addressed. Ms. Lowman added  
17 that one additional responder was Barbara George of Women's Energy Matters. Ms. Lowman  
18 will respond to Ms. George's comment soon.

19 Ms. Lowman stated that for the final HRA report, all responses to comments were incorporated  
20 into the document, including the reassessment of Section 8 and contamination and migration  
21 potentials. Building 322 in Parcel A was added as an impacted site. The U.S. Geological Survey  
22 (USGS) aerial photographs provided by Mr. Campbell were included into the document. A  
23 building use comparison table was added that included information from the map found in  
24 Building 101. This map was hand-painted on a 5- by 8-foot piece of plywood. A building list  
25 from the map was compared to other lists. Based on this list, the map is believed to have been  
26 created in 1951 with buildings subsequently added to it. For example, Building 815 is included  
27 on the map but was not built until 1955. In response to numerous comments and concerns,  
28 sediment as a potential contamination and migration pathway was added to every site considered  
29 impacted and listed in Section 8 as well as those listed in Section 7 with a definition.

30 Three additional interviewees about past HPS operations were identified, but repeated attempts  
31 to contact them were unsuccessful. These possible interviewees include Ms. Kennedy's  
32 grandson, a Bayview community member, and an individual who had contacted USEPA about  
33 waste stored or disposed of on Parcel A. The third possible interviewee is a retired former Navy  
34 worker who decontaminated an Operation Crossroads ship.

35 The HRA team, including Ms. Lowman, Mr. Haney, and Mr. Polyak, performed a detailed final  
36 document review. The final HRA report was sent for print production, and the publication date  
37 is scheduled for 31 August 2004. Ms. Lowman stated the publication of the final document does  
38 not mean that the assessment process is complete; rather, this document provides a "snapshot in  
39 time." RASO will continue to investigate and interview. Additional information may be  
40 published in site-specific reports or as addenda to the HRA report.

41 Mr. Mason commented that he has met prior shipyard workers and inquired if these people could  
42 still be involved in the assessment. Ms. Lowman responded that she would be happy to contact  
43 them if their information was provided.

44 Ms. Lowman showed a picture of former Building 322. The building was surveyed and  
45 removed, and no contamination was found. The debris was surveyed, released, and disposed of

1 off site. The concrete pad was surveyed and removed. No contamination was found. A Final  
2 Status Survey was performed, which is a Multi-Agency Radiological Survey and Site  
3 Investigation Manual (MARSSIM) process to release a former radiologically impacted site. The  
4 survey was performed on the building footprint and the immediate surrounding area. Ms.  
5 Lowman showed a picture of the current site.

6 Ms. Lowman mentioned concerns regarding the selected reference area and noted that Mr. Dean  
7 from USEPA will provide some additional information regarding background radiation levels.  
8 Ms. Lowman noted that background areas are selected based on similarities in age, construction,  
9 and environment, and no history of radiological use. The environment of the background area  
10 needs to be similar to the investigation area because of naturally occurring radioactive material.  
11 Comparison readings are taken using the same instrumentation used for the Final Status Survey.  
12 Comparison samples are collected from the background and investigation areas. Readings and  
13 sample results should be consistent with those at other reference areas. Building 901 was used  
14 as the reference area for the Final Status Survey. This building was a former HPS Officer's Club  
15 with no indication of radiological activity.

16 Site release criteria are based on either risk-based or dose-based release limits for radiation.  
17 USEPA uses risk-based release limits, which are preliminary remediation goals (PRG) based on  
18 a 1-in-a-million risk. The PRGs are posted on USEPA's website and are reported in picocuries  
19 per gram of contamination or picocuries per liter of contamination. The Nuclear Regulatory  
20 Commission uses a dose-based release limit of 25 millirem per year (mrem/year). This dose is  
21 based on the residual radiological contamination left at a site after remediation is completed.

22 The Navy used the dose-based release criteria approach as requested by the California  
23 Department of Health Services (DHS). Although the DHS does not provide a specific number,  
24 the dose needs to be less than 15 mrem/year. The Final Status Survey determined the Class 1  
25 area dose to be around 0.812 mrem/year. The Class 2 area, which is surrounded by concrete, had  
26 a dose of 3.56 mrem/year at Building 322 after everything was removed, and this dose is  
27 considered extremely low.

28 The Final Status Survey report was issued on 27 July 2004. Building and concrete pad survey  
29 and disposal will be discussed in an addendum to the report. The regulatory agencies, including  
30 the DHS, are currently reviewing the report. The Navy is waiting for a final clearance letter  
31 from DHS. This clearance letter will be added as an addendum to the Parcel A FOST. Building  
32 322 is the final of the five previously identified radiologically impacted sites at Parcel A. The  
33 Navy received site clearance letters from the DHS for Buildings 816 and 821 previously.  
34 Buildings 813 and 819 were reallocated to Parcel D. Upon receipt of the DHS clearance letter,  
35 all radiological investigations at Parcel A will be complete.

36 The HRA identified radiologically impacted sites at HPS, and now the Navy is continuing  
37 radiological investigations. Signs will be posted at sites with known contamination, and access to  
38 buildings may be restricted. At Building 253, where contamination exists throughout the  
39 building, the entrances will be secured and signs will be posted. At Building 366, artists are  
40 currently remaining in the building. The concern in Building 366 is restricted to the floor drains  
41 and the ventilation system. Although access is not restricted to this building, signs will be posted  
42 regarding potential radioactive contamination in the flooring and ventilation. Signs will be  
43 posted in 500 areas of the base containing known contamination, including the shoreline,  
44 Building 364, and Building 211.

45 Dr. Sumchai asked for additional explanation regarding the artists in Building 366. Mr. Forman  
46 responded that the data for Building 366 were released in October/November 2003. The Navy  
47 explained that although the radiation levels in the building were extremely low, the remediation

1 actions would affect the integrity of the building and would require the artists to relocate. The  
2 artists wanted to remain in the building as long as possible. Before any work begins on the  
3 building, the Navy is required to find a suitable relocation building for the artists, which will  
4 require a Finding of Suitability to Lease (FOSL). Dave Terzian, HPS Artist Buildings Manager,  
5 has been working with the artists to find an acceptable building. The artists will likely remain in  
6 Building 366 until a FOSL is approved. Dr. Sumchai inquired about the dose assessment for this  
7 building. Ms. Lowman responded that the risk was extremely low and was based on  
8 conservative factors, including a 50-year occupancy. Ms. Lowman stated that the contamination  
9 is currently in place and is not moving; however, during the decontamination process, the piping,  
10 drains, and sanitary lines will have to be removed, which requires the building to be unoccupied.

11 Ms. Oliva commented that approximately 8 months ago she had requested that the Navy consider  
12 tenting Building 366 during remediation and was informed it would be too costly. Ms. Oliva  
13 inquired if her proposal could be re-evaluated. Ms. Lowman responded that tenting was  
14 unnecessary because all work will be performed inside the building. The sewer in front of the  
15 building is not scheduled for remediation yet because it requires further investigation.

16 Ms. Lowman stated that efforts are being initiated to coordinate non-radiological site work with  
17 work on the radiologically impacted sites. RASO will review all work plans prior to the start of  
18 any work on an impacted site. This work could include polychlorinated biphenyl (PCB)  
19 remediation work, installation of groundwater monitoring wells, or work on methane gas  
20 extraction systems. RASO will ensure that proper controls are applied and that workers are  
21 informed of any health and safety issues. Equipment used for non-radiological work will be  
22 screened upon completion of the work to ensure that there is no residual contamination.

23 Ms. Lowman provided several examples of this coordination work. An aboveground sewer  
24 bypass was in place at Building 819 because this building was no longer a pump station. Work  
25 is being performed to use the existing belowground piping. RASO is supporting this project by  
26 screening the piping and communicating with workers. A second project involves soil from well  
27 borings from the installation of groundwater monitoring wells. RASO will perform a  
28 radiological screening and sampling of the soil prior to its disposal. A third project involves the  
29 storm drain adjacent to the Building 130 area. The drain has a catch basin for surface water,  
30 which then runs down a 20-foot-long drain and empties into San Francisco Bay. This storm  
31 drain line was discovered during excavation work. Sediment samples collected from the drain  
32 line contained elevated cesium levels. Additional radiological studies are now being performed  
33 at this site. Ms. Lowman noted that this storm drain line drains only the catch basin and is not  
34 connected to the basewide storm drain system.

35 Ms. Lowman discussed completed work, including work at Buildings 322 and 819. The pump  
36 station was removed from Building 819. The survey of the pump station found no  
37 contamination. The Final Status Survey of Building 819 is pending.

38 Ms. Lowman then discussed an ongoing characterization project at Building 253 to determine the  
39 type and extent of contamination within the building. The characterization requires the removal  
40 of some areas of known contamination, including some equipment and flooring on the ground  
41 floor. Any equipment remaining in the building, such as desks, chairs, and workbenches, will be  
42 screened for contamination. The ventilation system will also be checked. Ms. Lowman  
43 explained that Building 253 was likely the radium dial paint shop. Although no actual  
44 documentation has been found, boxes of radium dials and gauges were found within the building.  
45 As a result, some radium levels may be detected in the piping, which will be traced to the street.

46 Ms. Lowman discussed another ongoing project at the Metal Reef/Metal Slag in IR-02 at the  
47 Parcel E shoreline. Characterization work is being performed to define the extent of the area.

1 The regulators approved the work plan, and work has started. Although this work is non-  
2 radiological, some radioactive anomalies were found in the area. As a result, radiological  
3 support is being provided, including sample screening and worker education.

4 Ms. Lowman discussed an ongoing project at IR-02 Northwest and Central, an area of known  
5 radium dials and gauges. The work plan for this area is currently being revised after RASO  
6 review. Mr. Tompkins inquired about a dispute regarding the cleanup of this area. Mr.  
7 Tompkins stated that the Navy proposed remediation of the radiological contamination only,  
8 whereas the state's position was to address both radiological and chemical contamination at the  
9 same time. Ms. Lowman responded that the work plan has been revised. The project is a joint  
10 venture between RASO and Southwest Division because RASO does not have jurisdiction over  
11 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)  
12 contaminants unless that waste is considered at mixed waste. Mr. Tompkins asked for  
13 clarification regarding RASO's jurisdiction of soil contamination surrounding a radium dial. Ms.  
14 Lowman responded that 1 foot of soil around a gauge is removed as a general measure to remove  
15 residual contamination. If the soil contains other contaminants besides radiation, then it is mixed  
16 waste and it falls under the radioactive waste program. Areas of chemical but not radiological  
17 contamination fall under the CERCLA program. Ms. Lowman stated that this identification is a  
18 very involved process.

19 Ms. Lowman explained that the work plan is very detailed for this investigation and for the PCB  
20 Hot Spot soil excavation project. Both work plans are currently being revised.

21 Ms. Lowman discussed an upcoming project for Building 146 on Parcel B next to IR-07 and IR-  
22 18. The work plan for this project is being revised for a characterization survey. A Class 3  
23 MARSSIM survey that covered 20 percent of the building has been conducted. During the  
24 HRA, it was discovered that the building was used as a turn-in point for the Navy's radium  
25 removal program. This program, which began in the 1960s, replaced the radium dials or gauges  
26 from ships. As a result of this information, the building survey will cover 100 percent of the  
27 building, including the ventilation system and the piping.

28 Ms. Lowman discussed another pending project at IR-07 and IR-18. Various surveys have been  
29 conducted at these fill areas. The work plan is being revised to cover 100 percent of the sites,  
30 including the shoreline areas up to the dry docks.

31 Ms. Lowman discussed the pending Phase V reports. Field work was conducted from January  
32 2002 through June 2003. The reports were written for different sites in Parcels B, C, and D. The  
33 Parcel E report has not yet been generated, although the data are available. Work was stopped  
34 on these reports because the team focused on the HRA. RASO is now planning to review the  
35 Phase V reports. Once RASO approves the reports, they will be forwarded to the regulators.  
36 RASO is hoping to complete these reports during the next 6 to 8 months.

37 Ms. Lowman presented the planned work for fiscal year (FY) 2005. This work includes the  
38 preparation of the Phase V Parcel E reports and the remediation and Final Status Survey of  
39 Building 366. The Building 366 work is contingent on finding a new building for the artists.  
40 Additional remediation is planned for Building 364 as well as the Final Status Survey. Building  
41 211 contains thorium contamination on the ground floor. This area will be remediated, and the  
42 Final Status Survey will be conducted. Other work planned for FY 2005 includes the IR-02  
43 Northwest and Central remediation, the PCB Hot Spots radiological support and remediation,  
44 and the IR-04 Scrap Yard evaluation. Additional characterization of the site boundary is  
45 required at IR-04.

46 Ms. Lowman presented the new scoping surveys planned for FY 2005 at previously unsurveyed  
47 areas. Survey areas planned include the power plants at Buildings 203 and 521. These power

1 plants burned plutonium-contaminated fuel and have radium dials on the boilers inside the  
2 building. Building 408 is a smelter in Parcel D. The building is full of firebrick, which contains  
3 naturally occurring levels of radiation. In addition, metals placed in the smelter likely contained  
4 radium dials and gauges. Building 813 contained a strontium-90 leak as well as warning signs  
5 (in German) for radiation. Building 813 was reallocated from Parcel A to Parcel D. Dry Docks  
6 5 and 7 are planned for new scoping surveys. Dry Dock 6 was previously investigated, but  
7 because of some uncertainty regarding the location of the Operations Crossroad ships, all of the  
8 dry docks will be surveyed, including the pumps and sediment at the bottom of the dry docks.  
9 Building 114 in Parcel B is a former Naval Radiological Defense Laboratory (NRDL) building,  
10 although its exact use is unknown. The building has been torn down. A scoping survey is  
11 planned for Building 140 and the Discharge Tunnel, which is the Dry Dock 3 drain system in  
12 Parcel C. Building 142 is another NRDL site planned for surveying in FY 2005.

13 Ms. Lowman asked for any questions. Ms. Oliva proposed that additional information obtained  
14 from the scoping and characterization surveys be added as an addendum to the HRA instead of  
15 as a separate report. Ms. Lowman responded that the documents for the individual sites would  
16 be site-specific reports about each investigation. Ms. Lowman agreed that it was a good idea to  
17 periodically update the HRA with results from specific parcels or areas.

18 Dr. Sumchai thanked Michael Work of USEPA for addressing some concerns. Dr. Sumchai  
19 stated she had reviewed the gamma-spectroscopy survey results with Clifton Smith, C.J. Smith  
20 and Associates. Dr. Sumchai questioned the use of Building 901 as a reference because of the  
21 use of sandblast material as fill in the area, resulting in possible radiological contamination. In  
22 addition, the presence of some man-made radionuclides, including europium 152 and 154, were  
23 detected at Building 901. Ms. Lowman responded that the sandblast grit issue was planters  
24 outside the building and the soil and planters outside have been removed from the site.  
25 Reference area samples were collected from inside the building and from asphalt and concrete  
26 outside of the building. Because the sandblast grit has been removed, it should not impact the  
27 reference areas. Ms. Lowman discussed uncertainties associated with the presence of europium  
28 152 and 154 in the gamma-spectroscopy reports. Ms. Lowman explained that the energy peaks  
29 exhibited by a sample are compared against a library of information, and the uncertainty is the  
30 percentage of accuracy of those peaks. Ms. Lowman stated that she examined the reports in  
31 detail and found nothing to indicate the presence of radiation.

32 Mr. Tompkins noted the elevated rate of breast cancer in Bayview-Hunters Point and inquired if  
33 air monitoring would be performed for the PCB Hot Spot area. Ms. Lowman responded that air  
34 monitoring is always conducted for radiological work performed at a site. Mr. Forman stated  
35 that this issue could not be fully addressed until the work plan and action memorandum for the  
36 PCB Removal Action are sent out.

37 Mr. Tompkins stated that in earlier studies, scoping was not performed on the entire sewer  
38 system. Based on the fact that these lines can back up and potentially impact households, Mr.  
39 Tompkins requested the Navy to scope the entire sewage system. Ms. Lowman responded that  
40 the HRA lists the entire system except in the upper part of Parcel A. The HRA includes the 707  
41 triangle systems at the former location of the 500 buildings, the drain lines on Cochrane Street  
42 between Buildings 364 and 365, Building 253, and Building 819. The HRA shows every outfall  
43 and the storm and sewer drain lines for every parcel.

44 Mr. Campbell stated that although a number of records have been destroyed, it is known that  
45 medical and radiological wastes subject to liquefaction were dumped at Hunters Point, probably  
46 at Parcel E. Mr. Campbell stated that gases in the landfill could potentially ignite based on the  
47 historical explosion in the San Francisco Marina District. Mr. Campbell asked if the radiological

1 aspects of the landfills were being adequately addressed given the high methane factors with  
2 volatile organic compounds. Mr. Campbell suggested that landfill disposal records be examined.  
3 Ms. Lowman responded that she has examined some of the disposal records. However, few  
4 documents are available because NRDL seems to have destroyed all documents upon notification  
5 of closure of NRDL. Ms. Lowman received five reports from one former employee who had  
6 removed the reports from the trash bins. Based on these reports, waste was brought to NRDL  
7 from many sources, packaged at the 707 triangle, and then disposed of at sea. Ms. Lowman does  
8 not have records for the disposal of building debris. Ms. Lowman stated that in case of a fire,  
9 she recommends radiological and air monitoring. Regarding waste liquefaction, she stated that  
10 she would evaluate the situation when and if it arises.

11 Mr. Surber commented that only 10 minutes remained of the scheduled meeting and several  
12 agenda items had not been covered. Mr. Tompkins made a motion to extend the meeting, and  
13 Melita Rines, RAB member, suggested extending the meeting to 8:15 p.m. The motion to extend  
14 the meeting was passed.

15 Ms. Oliva asked why surveys were not being conducted on the storm drains and sewers in Parcel  
16 A. Ms. Lowman responded that the upland portion of the parcel has no radiological history.  
17 Two areas of sandblast grit were removed, but these areas would not have impacted the storm  
18 drains or sewer lines. Ms. Oliva stated that Building 101 is in Parcel A and is close to Dry Dock  
19 4, which is impacted. Ms. Lowman stated that she did not find any radiological history for  
20 Building 101. Ms. Oliva requested as an action item that the Navy survey the storm drains and  
21 sewers in the vicinity of Building 101. Ms. Lowman agreed to the action item.

22 J.R. Manuel, RAB member, commented that most of the City of San Francisco is located on a  
23 landfill that decomposes and creates methane gas. In addition, studies have shown that  
24 aboveground power lines may result in higher incidence of cancer from electromagnetic fields.  
25 Mr. Manuel asked if any information existed regarding above-average incidences of breast  
26 cancer on the base. Ms. Lowman responded that a health study of workers at HPS has not been  
27 conducted and that it is outside the charter of the HRA to perform a health study. Ms. Lowman  
28 suggested that this concern be addressed with Southwest Division.

29 Mr. Surber thanked Ms. Lowman for her presentation.

### 30 **Subcommittee Updates**

#### 31 Membership, Bylaws & Community Outreach Subcommittee (Melita Rines, Leader)

32 Ms. Rines opened the floor to vote on the Revised RAB Bylaws. Ms. Rines noted that the  
33 proposed changes to the RAB bylaws alters the time period for member absences from the  
34 calendar year to a 12-month period. RAB members will not be permitted to miss four meetings  
35 in a 12-month period. In September 2004, these new bylaws will go into effect, and all RAB  
36 members will have a clean attendance slate. Ms. Rines motioned for the RAB to pass the revised  
37 bylaws. A hand vote was taken. Eight people voted to approve the bylaws, and four people  
38 voted against the approval. The motion carried.

39 The next meeting of the Membership, Bylaws & Community Outreach Subcommittee will be at  
40 6:30 p.m. on 15 September 2004, at the Anna Waden Branch Library.

#### 41 Economic Development Subcommittee (Maurice Campbell, Leader)

42 Mr. Campbell stated that the subcommittee met on 10 August 2004, and that the meeting minutes  
43 were transmitted by e-mail. Mr. Campbell stated that the economic numbers look better, but  
44 because the meeting minutes are fairly complex, he would carry over discussion of the report  
45 until the next meeting.



1 The next meeting of the Economic Development Subcommittee will be at 2:30 p.m., 7  
2 September 2004, at the Anna Waden Branch Library.

3 Technical Review Subcommittee (Lea Loizos, Leader)

4 Ms. Loizos said the subcommittee met on 18 August 2004. The main topic of discussion was the  
5 manganese issue, particularly in Parcel B. The Navy is preparing a technical memorandum in  
6 support of a Record of Decision (ROD) amendment for Parcel B. Ms. Loizos stated that the  
7 subcommittee developed a list of requests for the Navy and the BRAC Cleanup Team (BCT),  
8 which she will forward to the Navy. These requests include a copy of the BCT's comments on  
9 the 2002 construction summary report. Ms. Loizos asked the Navy to provide a current figure  
10 that shows all sampling points, manganese concentrations, and sampling depths. Ms. Loizos also  
11 requested that the Navy attend an upcoming Technical Review Subcommittee meeting to discuss  
12 metals at HPS, particularly in Parcel B. The meeting minutes provide some of the specific  
13 information requested from the Navy at that meeting. Ms. Loizos also asked for the complete  
14 characterization data and remedial actions for Parcel B as well as the electronic database prior to  
15 the release of the technical memorandum.

16 Ms. Loizos requested that interested members sign up for the ZVI field trip, including those only  
17 able to attend a weekend trip.

18 The next meeting of the Technical Review Subcommittee will meet at 6:00 p.m. on 14 September  
19 2004, at the Community Window on the Shipyard, 4634 Third Street.

20 Lowman Radiological Subcommittee of the HPS RAB (Ahimsa Sumchai, Leader)

21 Dr. Sumchai thanked the members for attending. Dr. Sumchai suggested that any outstanding  
22 issues or questions from Ms. Lowman's presentation be addressed at the next subcommittee  
23 meeting. Dr. Sumchai stated that the subcommittee meeting focused on the responses to  
24 comments on the HRA. Dr. Sumchai stated that she would provide a condensed discussion by e-  
25 mail.

26 Dr. Sumchai stated that in August 2002, the Redevelopment Agency responded to the civil grand  
27 jury's 2001-2002 report on HPS. This report contains four findings and recommendations by the  
28 civil grand jury. The third finding and recommendation concerns health hazards at HPS. The  
29 civil grand jury states that there is no agreement between agencies regarding health hazards and  
30 encourages direct communication among all governmental agencies. The finding and  
31 recommendation also identifies the lack of complete data and documentation regarding the extent  
32 of site characterization, which increases the level of community mistrust. The report  
33 recommends that the city work with the Navy and the environmental regulators to review  
34 available data in an effort to facilitate site characterization. The report recommends a clear  
35 schedule be made available to the public. Dr. Sumchai stated that the Department of Public  
36 Health has never responded to these findings. Dr. Sumchai motioned that the RAB support a  
37 request to the Department of Public Health to formally respond to the findings and  
38 recommendations of the civil grand jury report, specifically regarding the full site  
39 characterization and health and safety issues. Mr. Tompkins seconded the motion, and the  
40 motion carried.

41 Dr. Sumchai stated that one comment on the HRA identified areas with elevated levels of  
42 radiation in the industrial landfill. The relationship between uncapped areas and hot spots in the  
43 landfill is unclear. Dr. Sumchai stated that RASO's response to this concern mentioned that an  
44 extensive characterization survey of the industrial landfill was conducted during the Phase V  
45 investigation. Dr. Sumchai noted that the Navy has not yet reviewed the final survey reports.  
46 Dr. Sumchai motioned that RASO prioritize the review of the Phase V investigation to make the

1 characterization of the landfill its top priority because this information should be available prior  
2 to conveyance of property. Mr. Tompkins seconded the motion, and the motion carried.

3 Dr. Sumchai noted that a USEPA comment on the HRA identified an interview with William  
4 Grab that indicated that some of the Operations Crossroads sandblast material went into the weir  
5 at the end of the dry docks. The comment notes that all of the dry docks are at risk and that the  
6 tunnels beneath Dry Dock 4 are full of sediment. Dr. Sumchai noted that Ms. Lowman identified  
7 Dry Docks 6 and 7 for investigation. Dr. Sumchai stated that the investigation of all dry docks in  
8 Parcel F would be discussed further at the next Radiological Subcommittee meeting.

9 The next meeting of the Lowman Radiological Subcommittee of the HPS RAB will be from 3:00  
10 p.m. to 5:00 p.m. on 22 September 2004, at The Greenhouse, which is located at 4919 Third  
11 Street at Palou.

### 12 **Future Agenda Topics**

13 Aside from the standard agenda topics and subcommittee updates, no additional agenda topics  
14 were suggested.

15 There were no further announcements. The meeting adjourned at 8:10 p.m.

16 **Reminder: The next RAB meeting will be from 6:00 to 8:00 p.m. on Thursday evening, 23**  
17 **September 2004, at Building 101 at HPS.**

**ATTACHMENT A  
LIST OF ATTENDEES  
RESTORATION ADVISORY BOARD MEETING  
26 AUGUST 2004**

<b>Name</b>	<b>Association</b>
1. John Adams	SulTech
2. Patricia Brown	Shipyard artist
3. Phil Burke	Lennar
4. Barbara Bushnell	RAB member, ROSES, Silverview Terrace Homeowners Association
5. Maurice Campbell	<b>RAB Community Co-chair</b> , BDI, CFC, New California Media
6. Paul Carp	Nancy Pelosi District Office
7. George Cicotte	Air Force Institute for Operational Health
8. Charles L. Dacus, Sr.	RAB member, ROSES
9. Daryl DeLong	New World Technology
10. Stephen Dickson	Young Community Developers
11. Benjamin Feick	Waste Solutions Group
12. Keith Forman	<b>Navy, RAB Co-chair</b>
13. Marie J. Franklin	RAB member, Shoreview Environmental Justice
14. Barbara George	Women's Energy Matters
15. Jennifer Gibson	SulTech
16. Mitsuyo Hasegawa	RAB member, JRM & Associates
17. Chuck Holmon	Foster Wheeler
18. Carolyn Hunter	SulTech
19. Jackie Lane	US EPA Community Outreach
20. Tom Lanphar	California Department of Toxic Substances Control (DTSC)
21. Lisa Laulu	All Islanders Gather as One
22. Lea Loizos	RAB member, ARC Ecology
23. Laurie Lowman	Navy, Radiological Affairs Support Office (RASO)
24. Leslie Lundgren	SulTech
25. Kevyn Lutton	RAB member, resident
26. J.R. Manuel	RAB member, JRM Associates
27. Jesse Mason	RAB member, CFC
28. James Morrison	RAB member, Environmental Technology, ROSES
29. Sherlina Nageer	Literacy for Environmental Justice
30. Christine M. Niccoli	Niccoli Reporting, court reporter
31. Georgia Oliva	RAB member, Shipyard artist
32. Jeanette Osborne	Community member
33. Ralph Pearce	Navy, Remedial Project Manager
34. Karen Pierce	RAB member, BVHP Democratic Club, HEAP
35. Melita Rines	RAB member, India Basin Neighborhood Association
36. Sam Ripley	RAB member, Samoan American Media Services
37. Dennis Robinson	Shaw Environmental & Infrastructure, Inc
38. Lee Saunders	Navy, Public Affairs Office (PAO)
39. Matthew Slack	Navy, RASO
40. Clifton Smith	C.J. Smith & Associates, Eagle Environmental Construction
41. Peter Stroganoff	Navy, ROICC Office
42. Ahimsa Sumchai	RAB member, BVHP Health and Environmental Resource Center
43. Robert Surber	Pendergrass & Associates
44. Keith Tisdell	RAB member, resident
45. Raymond Tompkins	RAB member, BVHP Coalition on the Environment
46. Julia Vetromile	SulTech

47. Leilani Wright	RAB member, JRM Associates
48. Michael Work	RAB member, USEPA

**ATTACHMENT B  
ACTION ITEMS  
RESTORATION ADVISORY BOARD MEETING  
26 AUGUST 2004**

<b>Item No.</b>	<b>Action Item</b>	<b>Due Date</b>	<b>Person/Agency Committing to Action Item</b>	<b>Resolution Status</b>
<b>Carry-Over Items</b>				
1.	Navy to notify David Terzian and Navy Caretaker Site Office prior to removal of AMC's cranes at Dry Dock 4	TBD	Navy/ Keith Forman	
2.	RAB members with information on potential storage bunkers to provide this information to the Navy; Navy will then set up a field trip to inspect areas identified by the RAB	TBD	RAB members	Maurice Campbell is looking for a second videotape and will then forward the information to the Navy. Jesse Mason will coordinate with Mr. Campbell on some additional information.
3.	Navy to arrange a field trip for RAB to view the zero-valent iron (ZVI) treatability study site	TBD	Navy/Keith Forman	This is scheduled for Tuesday, September 14, 2004 at 10:00 a.m.
4.	USEPA to provide information on measured levels of local background radiation	TBD	EPA/Michael Work	This report is to be provided next month. The delay is because the USEPA technical expert had been out of the office.
5.	Navy to provide Keith Tisdell with a copy of the Draft Final Parcel A	TBD	Navy/Keith	Copies were already provided to Ahimsa

<b>Item No.</b>	<b>Action Item</b>	<b>Due Date</b>	<b>Person/Agency Committing to Action Item</b>	<b>Resolution Status</b>
	FOST Revision 3		Forman	Sumchai, Maurice Campbell, and Lea Loizos.
<b>New Items</b>				
1.	Navy requested to provide a copy of the Building 322 survey report to Georgia Olivia	September RAB	Navy/Keith Forman	
2.	Navy to consider surveying all sewer lines in the vicinity of Building 101	TBD	Navy/Laurie Lowman	

<p style="text-align: center;"><b>HUNTERS POINT SHIPYARD RESTORATION ADVISORY BOARD (RAB) - MEETING AGENDA THURSDAY, 26 AUGUST 2004</b></p>
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**Day/Date:**  
**Thursday – 26 August 2004**  
**Time:**  
**6:00 p.m. to 8:00 p.m.**

**Location:**  
**Building 101**  
**Hunters Point Shipyard**  
**San Francisco, CA 94124**

<b>Facilitator:</b>	<b>Marsha Pendergrass</b>
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<b>Time</b>	<b>Topic</b>	<b>Leader</b>
6:00 p.m. – 6:05 p.m.	Welcome/Introductions/Agenda Review	Robert Surber (filling in for Marsha Pendergrass) <i>Facilitator</i>
6:05 p.m. – 6:15 p.m.	Approval of Meeting Minutes from 22 July 2004 RAB Meeting <ul style="list-style-type: none"> <li>Action Items</li> </ul>	Robert Surber
6:15 p.m. – 6:25 p.m.	Navy Announcements	Keith Forman <i>Navy Co-chair</i>
	Community Co-chair Report/Other Announcements	Maurice Campbell <i>Community Co-chair</i>
6:25 p.m. - 6:55 p.m.	Update on the HPS Radiological Program	Laurie Lowman <i>Navy Radiological Affairs Service Office</i>
<b>6:55 p.m. – 7:05 p.m.</b>	<b>BREAK</b>	
7:30 p.m. – 7:50 p.m.	Subcommittee Reports	Subcommittee Leaders
7:50 p.m. – 8:00 p.m.	Community Comment Period	Robert Surber
8:00 p.m.	Adjournment	Robert Surber

HPS web site: <http://www.efdsww.navfac.navy.mil/Environmental/HuntersPoint.htm>

RAB Navy Contact: Mr. Keith Forman (619) 532-0913 or (415) 308-1458

**HUNTERS POINT SHIPYARD**  
**RESTORATION ADVISORY BOARD MEETING MINUTES**  
**JULY 22, 2004**

These minutes summarize discussions and presentations held during the Restoration Advisory Board (RAB) meeting on Thursday July 22, 2004. The meeting was held from 6:00 p.m. to 7:50 p.m. at Dago Mary's Restaurant, which is Building 916 at Hunters Point Shipyard (HPS). A verbatim transcript also was prepared for the meeting and is available in the Information Repository for HPS and on the Internet (at [www.efds.w.navy.mil/Environmental/HuntersPoint.htm](http://www.efds.w.navy.mil/Environmental/HuntersPoint.htm)). The list of agenda topics is provided below. Attachment A provides a list of attendees. Attachment B includes action items that were requested or committed to by RAB members during the meeting. Attachment C includes all of the handouts from the RAB meeting on July 22, 2004.

**AGENDA TOPICS**

- Welcome, Introductions, and Agenda Review
- Approval of Meeting Minutes from RAB Meeting on June 24, 2004
- Navy Announcements
- Community Co-Chair Report and Other Announcements
- Subcommittee Reports
- Sequential Bioremediation at Remedial Unit C5 (Building 134)
- Rationale for Change of Parcel A Boundary and Status Update on Building 322
- Future Agenda Topics and Open Question and Answer Session
- Adjournment

**MEETING HANDOUTS**

- Agenda for RAB Meeting, July 22, 2004
- Meeting Minutes from RAB Meeting on June 24, 2004, including:
  - Action Items from RAB Meeting on June 24, 2004
  - Table 1, RAB Roll-Call Sheet
- Monthly Progress Report, June 2004
- PowerPoint™ Presentation, NAVFAC, Groundwater Cleanup using Bioremediation – A Treatability Study, July 22, 2004
- PowerPoint™ Presentation, NAVFAC, Parcel A FOST, July 22, 2004
- Meeting Minutes, HPS RAB, Membership/Bylaws and Community Outreach Subcommittee, July 14, 2004



- 1 • Meeting Minutes, HPS RAB, Lowman Radiological Subcommittee, June 23, 2004
- 2 • Handout, Pro Se Services, Bouchard Industrial Metals, Notification: Proposed Ship
- 3 Dismantling Facility, HPS, Dry Dock 4
- 4 • Handout, Community Window on the HPS Cleanup, Superfund Sites, and the Law: From
- 5 Discovery to Redevelopment
- 6 • Handout, Map of Former Locations of Buildings D-19 through D-23

### 7 **Welcome, Introductions, and Review of Agenda and Meeting Minutes**

8 Marsha Pendergrass, facilitator, called the meeting to order at 6:00 p.m. All participants in  
9 attendance introduced themselves. Ms. Pendergrass began the meeting and asked if there were  
10 any changes to the minutes for the meeting on June 24, 2004. Clifton Smith, meeting attendee,  
11 commented that two questions posed by him during the zero-valent iron (ZVI) presentation at the  
12 RAB meeting on June 24, 2004, were not included in the minutes. Ms. Pendergrass stated that  
13 the meeting minutes contain condensed information and reminded everyone that a verbatim  
14 transcript is also posted on the Navy's website. Ms. Pendergrass called for a motion to approve  
15 the June 2004 meeting minutes, and the minutes were approved.

16 Ms. Pendergrass reviewed the action items contained in the June 2004 meeting minutes and  
17 asked for a status of each item. Two items (Astoria Metals Company cranes at Dry Dock 4 and  
18 the field trip to the ZVI site) were carried over to the action items for the July 2004 meeting.  
19 The action item for the report to the Radiological and Health Risk Subcommittee on the  
20 establishment of preliminary remediation goals (PRG) for manganese was completed to the  
21 satisfaction of the RAB.

22 The action item on the field trip to the former ammunition bunker was not resolved to the  
23 satisfaction of the RAB members. Lani Asher, RAB member, stated during the June 2004  
24 meeting that she was not satisfied with the field trip to the concrete retaining wall and requested  
25 a follow up field trip be conducted. Pat Brooks, Navy Lead Remedial Project Manager (RPM),  
26 said he was not aware of any additional bunkers. Maurice Campbell, RAB Community  
27 Co-Chair, stated that he had viewed videotape from a former shipyard worker about bunkers at  
28 HPS and a newspaper article about children playing in the bunkers. Georgia Oliva, RAB  
29 member, suggested that Mr. Campbell provide Mr. Brooks with the bunker information and then  
30 a field trip to the bunkers could be arranged. Barbara Bushnell, RAB member, requested anyone  
31 with information on bunkers in Parcel A to provide this information to the Navy. The action  
32 item was amended, and the information will be reviewed during the August 2004 meeting.

### 33 **Navy and Community Co-Chair Reports/Other Announcements**

34 Mr. Brooks stated that he would be filling in for Keith Forman (Navy RAB Co-Chair) while he is  
35 on training duty. Mr. Brooks noted that a revised agenda had been sent to the RAB members  
36 that reflected changes in the format of the meetings. Mr. Brooks noted that a discussion occurred  
37 with Ms. Pendergrass and Mr. Campbell to change the format of the RAB meetings to allow for  
38 a more equitable time distribution between the Navy and the subcommittee reports. Ms.  
39 Pendergrass noted that the minutes from the subcommittee meetings will be added to the final  
40 meeting minutes on the Navy's website, in the Administrative Record, and in the Information  
41 Repository.

Mr. Campbell added that only one question per RAB member will be permitted during Navy presentations to allow additional time for community input during RAB meetings. Mr. Campbell noted that further discussions can take place in the subcommittee meetings. Mr. Campbell then requested the return of a map index showing the layout of HPS. A Navy subcontractor (Tetra Tech FW, Inc.) had removed the map from Building 101 to photocopy it. Mr. Campbell also noted an information handout from Pro Se Services, Bouchard Industrial Metals, on a proposed ship-breaking operation on Parcel 4. This proposal has not yet been reviewed by the Navy.

Karen Pierce, RAB member, asked that the policy regarding one question per RAB member be reconsidered because follow-up questions may be necessary due to various levels of expertise among the RAB members. Ms. Pierce stated that follow-up questions would help all RAB members to better understand the information being presented and to become better informed about issues at HPS.

**Reminder: The next RAB meeting will be held August 26, 2004, from 6:00 to 8:00 p.m., at Dago Mary's Restaurant, Building 916 at HPS.**

### Subcommittee Updates

#### Membership, Bylaws, and Community Outreach Subcommittee (MBCO) (Melita Rines, Leader)

Ms. Rines noted that the San Francisco Police Department (SFPD) attended the MBCO meeting but did not make available for RAB review the terms of their lease for Building 606 at HPS. The lease is in the process of being renegotiated between the City and County of San Francisco (City) and the Navy. Currently the Navy is examining the market value of property before finalizing the renegotiation of the City's lease of Building 606. Ms. Rines stated that a vote on the bylaws will take place at the RAB meeting in August 2004. The proposed bylaws change the time period for absences from the calendar year to a 12-month period. As a result, RAB members will not be permitted to miss more than four meetings in 12 months. Once passed by the RAB in September 2004, the revised bylaws will go into effect. Barbara Bushnell, RAB member, recommended keeping the absence rules in bylaws per calendar year to make it easier to track. Ms. Pendergrass requested that the proposed changes be sent to the RAB members for review before the vote next month. Carolyn Hunter, SulTech, agreed to mail them.

The next meeting of the Membership, Bylaws, and Community Outreach Subcommittee will be at 6:30 p.m. on August 11, 2004, at the Anna E. Waden Branch Library, located at 5075 Third Street. *\*Follow Up: The next MBCO subcommittee meeting will be moved due to the unavailability of the Anna Waden Library Community Room. The next MBCO subcommittee meeting will take place on August 11, 2004 at the Window on the Shipyard Office at 4634 Third Street.*

#### Technical Review Subcommittee (Lea Loizos, Leader)

Lea Loizos, RAB member, said the subcommittee had not met in June 2004. Ms. Loizos was considering having the Navy give a technical presentation during future meetings of the Technical Review Subcommittee.

The next meeting of the Technical Review Subcommittee will be at 6:00 p.m. on August 18, 2004, at the Community Window on HPS, located at 4634 Third Street.

#### Lowman Radiological Subcommittee of the HPS RAB (Ahimsa Sumchai, Leader)

1 Dr. Ahimsa Sumchai, RAB member, thanked the members for attending the subcommittee  
2 meeting. Dr. Sumchai stated that Dr. Dan Stralka from the U.S. Environmental Protection  
3 Agency's (EPA) Superfund division gave a presentation on manganese, which included a  
4 discussion on sources, background information, and the establishment of PRGs for manganese.  
5 Dr. Sumchai said that manganese has been detected at elevated concentrations at HPS, although  
6 it is unknown if these concentrations are naturally occurring. Dr. Sumchai continued that  
7 manganese is a natural component in the geology of HPS and is a product of the combustion of  
8 fossil fuels. Dr. Stralka discussed the establishment of the PRGs to protect human health,  
9 including the most sensitive populations. Previous studies evaluated in the establishment of the  
10 PRGs looked at manganese in drinking water and at the effect on human health from inhalation  
11 by mine workers, including neurological disorders. Dr. Sumchai stated that the subcommittee  
12 would also address the reuse plans and would table the discussion for a full RAB presentation.

13 Dr. Sumchai stated that the RAB should revisit the concern that a Naval Radiological Defense  
14 Laboratory (NRDL) laboratory was located in the D-series buildings. Dr. Sumchai expressed  
15 concerns about Building 103, which was identified in the Historical Radiological Assessment  
16 (HRA) as a personnel decontamination center during World War II and is currently leased to  
17 local artists. She recommended that this building should be retained for further evaluation based  
18 on the final Environmental Impact Report for Phase I development at Parcels A and B. Laurie  
19 Lowman, Naval Sea Systems Command, Radiological Affairs Support Office (RASO), will  
20 address some of these issues at her presentation during the August 2004 meeting.

21 Dr. Sumchai recommended that Dr. Stralka give a presentation on manganese to the full RAB, if  
22 the group is interested.

23 The next meeting of the Lowman Radiological Subcommittee of the HPS RAB will be from 3 to  
24 5:00 p.m. on August 25, 2004, at The Greenhouse, located at 4919 Third Street.

#### 25 Economic Development Subcommittee (Maurice Campbell, Leader)

26 Mr. Campbell did not have an Economic Development Subcommittee report for June 2004. The  
27 year-to-date and quarter-to-date financial information, as well as the community's portion of the  
28 cleanup of HPS, will be discussed during the next meeting.

29 The next meeting of the Economic Development Subcommittee will be at 2:30 p.m. on August  
30 10, 2004, at the Young Community Developers, located at 1715 Yosemite Avenue.

#### 31 **Results of a Study on Groundwater Cleanup using Bioremediation**

32 Glenn Christensen, Navy RPM, said this presentation would provide the results of a treatability  
33 study on groundwater cleanup using bioremediation. Mr. Christensen began by giving the  
34 background of Building 134. This building was a former machine shop on Parcel C. Building  
35 134 contained an oil/water separator (OWS) and a solvent degreaser pit that were removed. Soil  
36 and groundwater at Building 134 are contaminated with solvents. The degreaser pit has been  
37 over-excavated to install a large-diameter well. All contaminated soil above the water table was  
38 removed. The purpose of this study is to evaluate the potential of enhanced bioremediation to  
39 treat contaminated water at this building and also other areas of HPS.

40 Mr. Christensen described the process of in situ bioremediation, which destroys contaminants in-  
41 place with naturally occurring bacteria in the aquifer. After the bacteria are provided a food

1 source, they eat the contaminants, breaking them down into nontoxic chemicals. This process is  
2 similar to other biological processes, such as making wine or beer.

3 Mr. Christensen showed a map of the plume within Building 134. The source of the  
4 contamination is the former degreaser pit, which has been excavated and backfilled. An  
5 extraction well was installed in the former OWS excavation area to control groundwater  
6 movement. Mr. Christensen showed pictures displaying the installation of the well vaults. The  
7 monitoring wells are 4-inch flush-mounted wells located outside the building.

8 Mr. Christensen stated that the bioremediation study at Building 134 includes the following two  
9 steps: (1) bioremediation without oxygen (anaerobic) followed by (2) bioremediation in the  
10 presence of oxygen (aerobic). Some contaminants, such as tetrachloroethene (PCE) and  
11 trichloroethene (TCE), degrade without oxygen or under anaerobic conditions. Other  
12 contaminants, such as benzene, petroleum hydrocarbons, and semivolatile organic compounds,  
13 degrade with oxygen or aerobic conditions. Still other contaminants, such as vinyl chloride and  
14 chlorobenzene, can degrade under aerobic or anaerobic conditions.

15 Bioremediation creates favorable conditions for the breakdown of contaminants  
16 (biodegradation). Stage 1, anaerobic bioremediation, began on April 14, 2004, at Building 134,  
17 and it is expected to continue through November 2004. The second stage, aerobic degradation, is  
18 scheduled to begin in December 2004 and to continue through April 2005. The first stage,  
19 anaerobic breakdown of contaminants, is already occurring. PCE and TCE are degrading into  
20 vinyl chloride and ethene. Ethene is nontoxic, and detected concentrations are far below the  
21 lower explosive limit (LEL). The LEL for ethene is approximately 30,000 parts per million  
22 (ppm). The highest concentration of ethene detected is 7 ppm.

23 Ms. Pierce asked for a further explanation on anaerobic bioremediation. Mr. Christensen  
24 explained that the environment is currently anaerobic. Groundwater is pumped out of the  
25 aquifer, and sodium lactate is added to the water and then reinjected into the aquifer. Mr. Brooks  
26 added that petroleum hydrocarbons from an adjacent site have degraded in the aquifer and used  
27 up the oxygen in the groundwater, thereby creating favorable anaerobic conditions.

28 Mr. Christensen explained the aerobic biodegradation process. During this process, oxygen is  
29 added to the aquifer. A different type of bacteria uses oxygen for respiration, and these bacteria  
30 complete the destruction of the remaining contaminants. The byproducts of this process are  
31 carbon dioxide, water, and chloride ions.

32 Mr. Christensen showed a picture of the equipment inside of Building 134, as well as the  
33 excavation and treatment zone. The depth to groundwater is about 8 feet below ground surface.  
34 The walls of the building act as a containment cell. The soils are made of silty sands and silty  
35 clay. Several monitoring wells were installed outside the building. This study is treating the  
36 upper aquifer, known as the A1 Zone, but testing is also being performed on the lower aquifer to  
37 ensure that no vertical migration of contaminants is occurring.

38 Mr. Christensen showed three graphs of analytical results for groundwater samples from each  
39 well. Six samples have been collected to date. The trends in these three wells indicate that  
40 breakdown of PCE and TCE is already occurring, with an increase in vinyl chloride  
41 concentrations. The process is also pulling contaminants from the soil. Mr. Christensen then  
42 asked for questions.

1 Dr. Sumchai expressed concerns regarding the volatilization of byproducts, particularly at the  
2 groundwater outfall into the Bay. She stated that carbon dioxide is a global warming gas and  
3 therefore this is a concern for a community with respiratory problems. Another concern is the  
4 formation of ethene and chloride. Dr. Sumchai also asked if air monitoring data were being  
5 collected. Mr. Christensen responded that air monitoring was conducted at all times for the  
6 health and safety of workers.

7 Ms. Rines asked if the bacteria used in the aerobic biodegradation process are also naturally  
8 occurring and if so, then why doesn't the process occur naturally. Mr. Christensen responded  
9 that while it does occur naturally, this process speeds it up.

10 Mr. Campbell inquired about the effect of methane and ethane for global warming. Mr. Brooks  
11 responded that activities conducted during the treatability study or methane released from Parcel  
12 E would have less than a negligible effect on the global warming.

13 Raymond Tompkins, RAB member, inquired about the effects of sodium lactate on the bacteria.  
14 Mr. Brooks responded that the bacteria reproduce, grow, and eat the contamination as a food  
15 source.

16 Ms. Asher asked if this process had been used at other bases. Mr. Christensen responded that the  
17 Navy's contractor, Shaw Environmental & Infrastructure, Inc., had successfully used it at Point  
18 Mugu and Treasure Island. Ms. Asher then asked if there were other contaminants in the aquifer  
19 that were not being eaten by the bacteria. Mr. Christensen responded that this study was looking  
20 at the contaminants with the highest concentrations, notably PCE and TCE, although other  
21 contaminants are degraded aerobically and anaerobically. He stated that the work plans for this  
22 study have been submitted to and reviewed by both the RAB and the BCT.

23 Frank Niccoli, meeting attendee, stated that an increase in anaerobic biodegradation created a  
24 decrease in aerobic biodegradation in the aquifer. He asked if oxygen was injected into the wells  
25 for the aerobic biodegradation process, and Mr. Christensen responded that it was.

26 Clifton Smith, meeting attendee, inquired into the baseline conditions used for this study. Mr.  
27 Christensen responded that groundwater samples were collected previously from monitoring  
28 wells. Therefore, the Navy already had knowledge of PCE and TCE contamination at HPS. The  
29 Navy tested the groundwater samples to ensure a sufficient colony of the bacteria existed in the  
30 area. The Navy also measured groundwater parameters, including dissolved oxygen and  
31 temperature. Mr. Smith inquired if this study was based on published research, and Mr.  
32 Christensen responded that it was, including contractor knowledge of the process and previous  
33 data collected at HPS.

34 Ms. Loizos asked why it was necessary to circulate the groundwater. Mr. Christensen responded  
35 that this process ensured that sodium lactate was distributed evenly in the well. The circulation  
36 is turned off when sodium lactate is detected in the extraction well.

37 Ms. Oliva inquired into byproducts of the biodegradation process and expressed concerns about  
38 the explosive properties of ethene. Mr. Christensen stated that the maximum concentration that  
39 ethene will reach is 7 ppm, which is well below the LEL.

40 Chris Hanif, RAB member, reminded the Navy to explain terms and acronyms used in the  
41 presentations. Dr. Sumchai stated that a list of acronyms was provided during past RAB  
42 meetings and suggested this would be helpful for the RAB members.

## **Status of Parcel A FOST**

Mr. Brooks stated that before he addressed the Parcel A FOST and Building 322, he wanted to discuss the boundary changes of Parcel A. Mr. Brooks stated that the Navy's main objective is to clean up the parcels and transfer them to the City for productive reuse. Mr. Brooks stated that the boundary of Parcel A has been redrawn to exclude Buildings 813 and 819. Building 813 was an NRDL building that is a potential source of strontium from a leak in test equipment. Building 819 was a sewage pump station that could have received radioactive waste from sewer lines. The draft final HRA identified these buildings as impacted, so they were removed from Parcel A to allow for its transfer to the City.

Mr. Brooks began his discussion of Building 322 by showing a picture of the building, which has since been demolished. The Navy is currently working with EPA and the California Department of Health Services (DHS) to release the building so Parcel A can be transferred. Building 322 is a former guard shack that was previously used by NRDL as a storage area for instruments. It was formerly located on Parcel D and subsequently moved to Parcel A. The Navy conducted a radiation survey of the entire building. Based on the survey results, the Navy's Radiological Affairs Service Office (RASO) granted approval to demolish the building and it was sent to a landfill. A radiation survey was then conducted on the remaining concrete slab. No contamination was found, and the slab was subsequently broken up, and disposed of as construction debris.

On June 30, 2004, EPA conducted an independent radiological survey on the footprint of the building. This survey found no radiation at the site at concentrations above background. EPA used two instruments for the evaluation: a gamma scintillation probe and an Exploranium GR130 Mini Spectrometer. A nearby grassy area was also evaluated as a baseline. The EPA inspection concluded that no radiological contamination is affecting the environment at HPS due to activities previously conducted at Building 322 and that further radiological investigation of the site is not warranted. EPA concluded that the site of former Building 322 is eligible to be released for unrestricted reuse.

Mr. Brooks stated that the Navy's next step would be to compile the survey report and submit the report to the DHS following a review by RASO. The Navy will prepare the Draft Final Finding of Suitability to Transfer (FOST), Revision 3, which will include the letters of free release for the site. The Draft Final FOST, Revision 3, will have a 30-day comment period.

Ms. Oliva asked which instruments were used to evaluate the building materials. Mr. Brooks replied that the same instruments and analysis were conducted on all materials of the building. Ms. Oliva also asked when the report would be finished. Mr. Brooks responded that he expected it to be completed the following Tuesday, and that he would provide copies of the report to any interested RAB member.

Ms. Pierce stated that there are two sites for former Building 322 and she wanted to ensure that the original site was adequately addressed in Parcel D. Mr. Brooks stated that in the draft final HRA, the site of Building 322 on Parcel D is known as the "former site of Building 322" and a survey is recommended for that site.

Dr. Sumchai asked why the building had been demolished. Mr. Brooks responded that the building needed to be demolished in order to survey the concrete slab and soil underneath the building. Dr. Sumchai then inquired into the size of Parcel A and asked about the background

1 levels of radiation used. Mr. Brooks responded that background levels were measured at a  
2 nearby grassy area. Dr. Sumchai stated that 20,000 counts per minute appeared to be a high  
3 number. She inquired if any gamma rays had been detected at the site. Mr. Brooks stated that he  
4 would need to review the report.

5 Mr. Campbell stated that he would like more information on the background level of radiation at  
6 HPS. Mr. Brooks stated that background levels vary across HPS, but a range could probably be  
7 provided. Michael Work, EPA, will check if background levels are available for the San  
8 Francisco area from EPA.

### 9 **Future Agenda Topics**

10 Aside from the standard agenda topics and subcommittee updates, no additional agenda topics  
11 were suggested.

### 12 **Other Discussions and Topics**

13 The items below also were discussed at the July 2004 meeting. A verbatim account of these  
14 discussions is included in the Information Repository for HPS and may be found on the Internet  
15 at [www.efds.w.navy.mil/Environmental/HuntersPoint.htm](http://www.efds.w.navy.mil/Environmental/HuntersPoint.htm)

- 16 • Mr. Hanif stated that a training program for hazardous waste by Young Community  
17 Developers will take place beginning on September 1, 2004. At the completion of this  
18 training, Mr. Hanif will provide an informational presentation on the terminology of  
19 hazardous training programs at an upcoming meeting, which will be open to RAB  
20 members. Mr. Hanif will provide the dates for the training orientation and information to  
21 the RAB.
- 22 • Dr. Sumchai stated that an invitation had been extended to Gerald Vincent from the U.S.  
23 Army Corps of Engineers to give a presentation on formerly used defense sites. Dr.  
24 Sumchai will provide additional information on this schedule because Mr. Vincent is not  
25 available for the August meeting.
- 26 • Don Capobres from the San Francisco Redevelopment Agency (SFRA) stated that  
27 August 13, 2004, will be his last day with the agency. Mr. Capobres will coordinate with  
28 Mr. Campbell to introduce the SFRA's replacement to the RAB. He thanked the RAB  
29 members for their involvement the past few years.
- 30 • Dr. Sumchai stated that the Anna E. Waden Branch Library is an important resource to  
31 the community, and requested that it be stocked with the same documents as the main  
32 library. Mr. Brooks replied that the Anna E. Waden Branch Library does not have  
33 enough space available to fit all the Navy documents. Mr. Smith suggested the Navy put  
34 the administrative records on compact disc and then provide these to the library. The  
35 library has computers available where the documents could be viewed. Mr. Brooks  
36 agreed to look into providing compact discs of Navy documents for the Anna Waden  
37 Library.
- 38 • Mr. Campbell stated that future RAB meetings will focus on the subcommittees and their  
39 recommendations, and reminded everyone to participate in these meetings.

40 There were no further announcements. The meeting was adjourned at 7:50 p.m.

1 **Reminder: The next RAB meeting will be held from 6:00 to 8:00 P.M., Thursday evening,**  
2 **on August 26, 2004 at Dago Mary's Restaurant, Building 916 at HPS.**



**ATTACHMENT A**  
**JULY 22, 2004 - RAB MEETING**  
**LIST OF ATTENDEES**

<b>Name</b>	<b>Association</b>
1. John Adams	SulTech
2. Lani Asher	RAB member, CBE, CFC
3. Pat Brooks	Navy, Lead Remedial Project Manager
4. Amy Brownell	RAB member, SF Dept of Public Health
5. Barbara Bushnell	ROSES, Silverview Terrace Homeowners Association
6. Maurice Campbell	<b>RAB Community Co-chair</b> , CFC, New California Media
7. Don Capobres	San Francisco Redevelopment Agency
8. Shirley Cherry	SulTech
9. Glenn Christensen	Navy, Remedial Project Manager
10. Tommie Jean Damrel	SulTech
11. Steve Dixon	Young Community Developers
12. Jennifer Gibson	SulTech
13. Chris Hanif	RAB member, Young Community Developers
14. Carolyn Hunter	SulTech
15. Jackie Lane	EPA, Community Involvement
16. Tom Lanphar	RAB member, California Department of Toxic Substances Control
17. Lea Loizos	RAB member, ARC Ecology
18. James Morrison	RAB member, Environmental Technology, ROSES
19. Christine M. Niccoli	Niccoli Reporting, court reporter
20. Frank Niccoli	Niccoli Reporting
21. Georgia Oliva	RAB member, CBE, CCA member
22. Ralph Pearce	Navy, Remedial Project Manager
23. Marsha Pendergrass	Pendergrass & Associates
24. Karen Pierce	RAB member, BVHP Democratic Club, HEAP
25. Jim Ponton	RAB member, Regional Water Quality Control Board
26. Melita Rines	RAB member, India Basin Neighborhood Association
27. Dennis Robinson	Shaw Environmental & Infrastructure, Inc
28. Robert Server	Pendergrass & Associates
29. Clifton Smith	C.J. Smith & Associates, Eagle Environmental Construction
30. Peter Stroganoff	Navy, ROICC Office
31. Ahimsa Sumchai	RAB member, BVHP Health and Environmental Resource Center
32. Keith Tisdell	RAB member, resident
33. Raymond Tompkins	RAB member, BVHP Coalition on the Environment
34. Julia Vetromile	SulTech
35. Michael Work	RAB member, US EPA
36. Leilani Wright	RAB member, JRM Associates

**ATTACHMENT B**  
**JULY 22, 2004 - RAB MEETING**  
**ACTION ITEMS**

<b>Item No.</b>	<b>Action Item</b>	<b>Due Date</b>	<b>Person/Agency Committing to Action Item</b>	<b>Resolution Status</b>
<b>Carry-Over Items</b>				
1.	Navy to notify David Terzian and Navy Caretaker Site Office prior to removal of Astoria Metals Company's cranes at Dry Dock 4	To be determined	Navy/ Keith Forman	
2.	[Amended from June Action Item] RAB members with information on potential storage bunkers to provide this information to the Navy. The Navy will then set up a field trip to look at those areas identified by the RAB.	August RAB	RAB members	
3.	Navy to arrange a field trip for RAB to view the site where zero-valent iron will be used.	To be determined	Navy/Pat Brooks	Field work will begin mid-August; because it may begin before the next RAB meeting, the Navy will invite the RAB and the BCT via e-mail instead of setting a date at the August RAB meeting
<b>New Items</b>				
1.	EPA to provide information on measured levels of local background radiation	To be determined	EPA/Michael Work	
2.	Navy to check on the return of the map index to Building 101	To be determined	Navy/Pat Brooks	Navy will return map when finished with evaluation
3.	SulTech to mail copies of proposed membership bylaws to RAB members	August RAB	SulTech/Carolyn Hunter	This action item has been completed
4.	Navy to provide interested RAB members with a copy of the Draft Final FOST, Revision 3	To be determined	Navy/Pat Brooks	Copies provided to Ahimsa Sumchai, Maurice Campbell, and Lea Loizos
5.	Navy to assess the feasibility of providing Anna E. Waden Branch Library with HPS documents on compact disc	To be determined	Navy/Pat Brooks	Navy will include some CD versions of older

Item No.	Action Item	Due Date	Person/Agency Committing to Action Item	Resolution Status
				reports as well as maintaining hard copies for current work



## **Hunters Point Shipyard HRA Update 26 August 2004**

Laurie Lowman  
Director, Program Support and LLRW  
NAVSEADET RASO



## **HPS HRA**

- **Responses to comments on Draft Final  
HRA distributed 27 July 2004**
  - EPA
  - DTSC
  - CRWQCB
  - City of San Francisco Department of Public Health
  - Army Corps of Engineers
  - ARC Ecology
  - Dr. Deborah Santana
  - **RAB Members:**
    - Lynne Brown, Maurice Campbell, Dr. Sumchai

## HPS HRA (Cont.)

- **Modifications to document:**
  - All responses incorporated into HRA
    - Included reassessment of Section 8
  - Added Building 322 in Parcel A as an impacted site
  - Added USGS Aerial Photographs
  - Added building use comparison that included information from the HPS map found in Building 101
  - Added Sediment as a Potential Contamination and Potential Migration Pathway categories

10/15/2004

HPS

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## HPS HRA (Cont.)

- **3 additional interviewees identified**
  - Contact attempts unsuccessful
- **HRA Team performed final document review**
- **Final HRA sent for print production**
- **Final HRA publication date 31 August 2004**

10/15/2004

HPS

4

## BUILDING 322



10/15/2004

HPS

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## Building 322 (Cont.)

- **Building was surveyed and removed**
  - No contamination was found
  - Debris was surveyed, released and disposed off-site
- **Concrete pad was surveyed and removed**
  - No contamination was found
  - Debris was surveyed, released and disposed off-site
- **Final Status Survey (FSS)**
  - Performed on building footprint and immediate surrounding area

10/15/2004

HPS

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## Building 322 Site



10/15/2004

## Building 322 (Cont.)

- **Reference (Background) Area**
  - Similar in age, construction and environment with no history of radiological use
  - Comparison readings taken with the same instrumentation used for the FSS
  - Comparison samples taken
  - Readings and sample results should be consistent with readings from other reference areas
- **Building 901 used as reference area for Building 322 FSS**
  - Former HPS Officers' Club

10/15/2004

HPS

8

## Building 901



10/15/2004

HPS

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## Building 322 (Cont.)

- **Site Release Criteria**
- **EPA**
  - Risk based release limit
    - $10E-6$  ( $1 \times 10^{-6}$  or 1 in a million)
  - Preliminary Remediation Goals (PRGs)
- **Nuclear Regulatory Commission (NRC)**
  - Dose based release limit
  - 25 mrem/year

10/15/2004

HPS

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## Building 322 (Cont.)

- **California Department of Health Services (DHS)**
  - Dose based release limit
  - No specific number from DHS
    - Less than 15 mrem/year
  - Require a dose assessment of site
- **FSS Dose Assessment**
  - Class 1 Area - 0.812 mrem/year
  - Class 2 Area - 3.56 mrem/year

10/15/2004

HPS

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## Building 322 (Cont.)

- **Final Status Survey Report was issued 27 July 2004**
  - Report of building and concrete pad release surveys and disposal to be added as addendum
- **Currently under regulatory review**
- **Navy awaiting final site clearance letter from DHS**
  - Will be addendum to Parcel A FOST
- **This is the final radiological issue in Parcel A**

10/15/2004

HPS

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## Current HPS Radiological Sites

- Sites of known contamination must be identified to meet state and federal regulations
- Signs will be posted
- Access to areas with known contamination will be controlled
  - Entire site controls
  - Specific area controls

10/15/2004

HPS

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## Coordinated Site Work

- New efforts being initiated to coordinate non-radiological work on radiologically impacted sites
- RASO will review work plans prior to start of work
  - Controls will be applied if necessary
- Workers will be briefed
- Equipment will be screened at completion of work

10/15/2004

HPS

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## Coordinated Site Work (Cont.)

- **Building 819 Sewer Bypass**
  - Ongoing at this time
- **Soil from well borings near the landfill**
  - Removed when groundwater monitoring wells were installed around landfill
  - Being held for radiological screening

10/15/2004

HPS

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## Coordinated Site Work (Cont.)

- **Storm Drain adjacent to Building 130**
  - Storm drain line discovered during excavation
  - Preliminary results indicate elevated Cs-137 levels
  - Additional radiological studies pending

10/15/2004

HPS

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## Completed Work

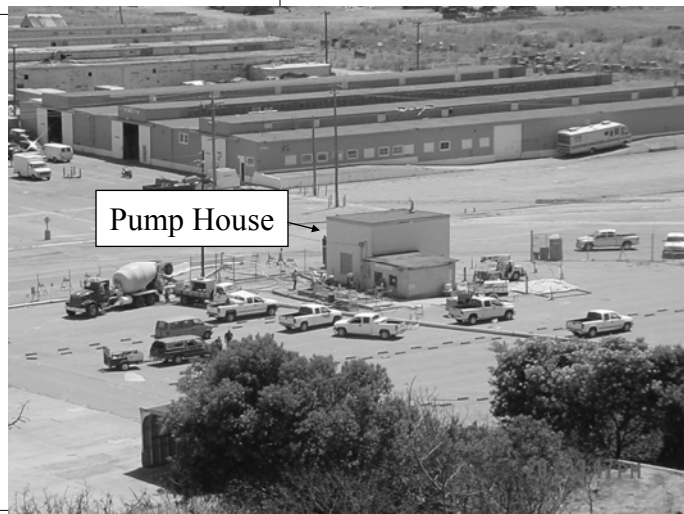
- Building 322 site
- Building 819 Dismantling, Removal and Packaging
  - Removal of pump system complete
  - Preliminary reports indicate no contamination was identified
  - Final Status Survey pending

10/15/2004

HPS

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## Building 819 (Pump House)



10/15/2004

# Ongoing Projects

## Building 253



10/15/2004

# Ongoing Projects

- **Building 253 Characterization**
  - Define the extent of contamination
  - Involves removal of some known contamination to allow characterization to be completed
  - Remaining equipment in building will be screened
  - Piping will be traced to the street

10/15/2004

HPS

20

## Ongoing Projects:

### Metal Reef



10/15/2004

## Ongoing Projects (Cont.)

- **Characterization of the Metal Slag/Metal Reef in IR-02**
  - Work Plan approved by regulators
  - Site work has started
  - Radiological support being provided

10/15/2004

HPS

22

## Pending Projects

- **IR-02 Northwest and Central Radiological Removal**
  - Work plan being revised after RASO review
- **PCB Hot Spot Soil Excavation**
  - Work plan being revised after RASO review

10/15/2004

HPS

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## Pending Projects

**Building  
146**



10/15/2004

## Pending Projects (Cont.)

- **Building 146**
  - Work plan being revised for characterization survey
  - Will cover 100% of building
- **IR-07/18**
  - Work plan being revised for scoping survey
  - Will cover 100% of site

10/15/2004

HPS

25

## Pending Projects (Cont.)

- **Phase V Reports**
  - Reports document field work from January 2002 to June 2003
  - Written reports for Parcel B, C and D sites currently under review by RASO
  - Parcel E reports not yet generated
  - Reports approved by RASO for release of a site will be forwarded to regulators

10/15/2004

HPS

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## Planned FY-05 Site Work

- **Preparation of Phase V Parcel E reports**
- **Completion of Pending Site Work**
  - **Building 366**
    - Remediation and Final Status Survey
  - **Building 364**
    - Remediation and Final Status Survey
  - **Building 211**
    - Remediation and Final Status Survey
  - **Building 253**
    - Remediation and Final Status Survey

10/15/2004

HPS

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## FY-05 Site Work (Cont.)

- **IR-02 Northwest and Central remediation**
- **PCB Hot Spots radiological support and remediation**
- **IR-04 Scrap Yard**
  - **Additional characterization, remediation and final status surveys**

10/15/2004

HPS

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## FY-05 Site Work (Cont.)

- **New Scoping Surveys**
  - **Buildings 203 and 521 (Power Plants)**
  - **Building 408 (Smelter)**
  - **Building 813**
  - **Drydocks 5 and 7**
  - **Building 114 Site**
  - **Building 140 and Discharge Tunnel**
  - **Building 142**

10/15/2004

HPS

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## Questions and Comments

10/15/2004

HPS

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# **HUNTERS POINT SHIPYARD MONTHLY PROGRESS REPORT**

**JULY 2004**

This monthly progress report (MPR) summarizes environmental restoration activities conducted by the Navy at Hunters Point Shipyard (HPS) during July 2004. This MPR is prepared in accordance with the HPS Federal Facility Agreement, Section 6.6. The MPR is presented in three sections: Section 1, Parcel Updates, summarizes key activities at each parcel completed during the past month and planned for the upcoming 2 months; Section 2, Schedule, identifies submittals, meetings, and field activities completed during the past month and planned for the upcoming 2 months; Section 3, Other, is intended for special announcements, changes in personnel, basewide issues, or other topics not included in Sections 1 or 2.

## **1.0 PARCEL UPDATES**

### **PARCEL B JULY 2004 ACTIVITIES**

- Continued post-injection groundwater monitoring for the Ferox injection treatability study at Building 123.
- Submitted final work plan with RTCs for follow-on soil vapor extraction (SVE) treatability study work plan. Began plans for implementation of SVE work plan.
- Continued preparation of a construction summary report (CSR) addendum that will present information for excavations not included in the draft CSR.
- Continued evaluation of human health and ecological risk assessment methodologies. Continued preparation of technical memorandum to support the record of decision (ROD) amendment (TMSRA).
- Continued preparation of the final corrective action plan (CAP) addendum with response to comments (RTC).
- Prepared and submitted final annual/October – December 2003 quarterly groundwater monitoring report with RTCs. Prepared and submitted draft January – March 2004 quarterly groundwater monitoring data package and field summary report. Began preparation of final January – March 2004 quarterly groundwater monitoring report with RTCs. Began conducting July – September 2004 quarterly groundwater sampling.
- Performed groundwater sampling per basewide groundwater monitoring SAP.

## **PARCEL B AUGUST 2004 – SEPTEMBER 2004 ACTIVITIES**

- Continue implementation of follow-on SVE treatability study work plan.
- Finalize preparation of and submit the final January – March 2004 quarterly groundwater monitoring report with RTCs. Begin preparation of April – June 2004 quarterly groundwater monitoring report. Continue conducting July – September 2004 quarterly groundwater sampling.
- Finalize preparation of and submit the Draft CSR addendum.
- Continue preparation of TMSRA. Conduct a storyboard meeting with regulatory agencies to discuss TMSRA.
- Finalize preparation of and submit the final CAP addendum with RTCs.

## **PARCEL C JULY 2004 ACTIVITIES**

- Continued anaerobic injections and groundwater circulation for sequential anaerobic/aerobic bioremediation treatability study in Building 134. Prepared and submitted final work plans with RTCs.
- Began preparation of the final work plan for follow-on zero valent iron (ZVI) treatability study at Building 272 with RTCs.
- Conducted Dry Dock 4 water sampling field work. Began preparation of the draft summary report.
- Continued preparation of the Parcel C Draft Feasibility Study (FS). Conducted a scoping meeting for the Parcel C FS.
- Submit final waste consolidation report.

## **PARCEL C AUGUST 2004 – SEPTEMBER 2004 ACTIVITIES**

- Perform groundwater sampling per basewide groundwater monitoring SAP.
- Monitor groundwater for evidence of biodegradation as part of the sequential anaerobic/aerobic bioremediation treatability study in Building 134.
- Finalize preparation of and submit the draft summary report for Dry Dock 4 water sampling field work.
- Continue preparation of the Draft FS.

- Finalize preparation of and submit final work plan with RTCs for follow-on ZVI treatability study at Building 272.

#### **PARCEL D JULY 2004 ACTIVITIES**

- Continued sampling and removal of stockpiles under the time-critical removal action (TCRA).
- Began preparation of the draft final FS

#### **PARCEL D AUGUST 2004 – SEPTEMBER 2004 ACTIVITIES**

- Complete field work for Parcel D TCRA. Begin preparation of the draft removal action closeout report
- Perform groundwater sampling per the basewide groundwater monitoring SAP.
- Begin preparation of the Draft Final FS.

#### **PARCEL E JULY 2004 ACTIVITIES**

- Continued monthly gas monitoring at the industrial landfill. Submitted final May 2004 landfill gas monitoring report. Began preparation of June 2004 landfill gas monitoring report. Continued to prepare final January 2004 landfill gas monitoring report and final interim landfill gas monitoring and control plan.
- Submitted annual report for landfill storm water discharge management program (SWDMP).
- Continued preparation of Parcel E-2 (landfill) Remedial Investigation/Feasibility Study (RI/FS)
- Continued operation of groundwater extraction system at industrial landfill.
- Continued implementation of the metal reef/slag removal action site characterization work plan.
- Continued preparation of Investigation Remediation (IR) Site 02 removal action work plan (to be performed under the basewide radiation removal action).
- Continued preparation of action memorandum and work plan for removal of soil containing polychlorinated biphenyls (PCB).
- Submitted final waste consolidation report.

## **PARCEL E AUGUST 2004 – SEPTEMBER 2004 ACTIVITIES**

- Perform groundwater sampling per basewide groundwater monitoring SAP.
- Continue preparation of RTCs for draft landfill extent report.
- Continue preparation of RTCs for draft landfill cap removal action closeout report.
- Prepare and submit final landfill liquefaction potential report and RTCs.
- Continue preparation of IR-02 removal action work plan (to be performed under the basewide radiation removal action).
- Continue preparation of and submit the action memorandum and work plan for removal of soil containing PCBs.
- Continue preparation of final landfill gas closeout report, pending receipt and resolution of agency comments.
- Record monthly storm water visual observations at the industrial landfill during rain events (if any).
- Continue monthly gas monitoring at the industrial landfill. Prepare and submit final June 2004 landfill gas monitoring reports. Begin preparation of July 2004 and August 2004 landfill gas monitoring reports. Prepare and submit final January 2004 landfill gas monitoring report and final interim landfill gas monitoring and control plan.
- Continue preparation of the data summary report and draft shoreline technical memorandum for the standard data gaps investigation.
- Continue implementation of the final metal reef/slag removal action site characterization work plan.
- Continue preparation of Parcel E-2 (landfill) RI/FS.
- Continue operation of groundwater extraction system at industrial landfill.

## **PARCEL F JULY 2004 ACTIVITIES**

- Continued preparation of draft final validation study report with RTCs.

## **PARCEL F AUGUST 2004 – SEPTEMBER 2004 ACTIVITIES**

- Prepare and submit draft final validation study report with RTCs.

## 2.0 SCHEDULE

This section presents meetings and deliverables conducted and planned during this reporting period.

Activities Conducted	Date
Parcel C feasibility study scoping meeting	July 1, 2004
Submitted annual report for landfill SWDMP	July 1, 2004
Submitted May 2004 Monthly Landfill Gas Monitoring Report	July 1, 2004
Submitted final Parcels C and E waste consolidation summary reports	July 6, 2004
Submitted final follow-on SVE work plan with RTCs	July 7, 2004
Submitted January to March 2004 groundwater monitoring data package/field summary report	July 20, 2004
BCT monthly meeting	July 21, 2004
RAB meeting	July 22, 2004
Submitted final annual/October – December 2003 quarterly groundwater monitoring report	July 22, 2004

Activities Planned	Date
Submit Final June 2004 Monthly Landfill Gas Monitoring Report	August 13, 2004
Submit Draft Landfill Liquefaction Potential Report	August 13, 2004
Submit Final January 2004 Monthly Gas Monitoring Report with RTCs	August 13, 2004
Submit Final Interim Landfill Gas Monitoring & Control Plan	August 13, 2004
Parcel B TMSRA storyboard meeting	August 18, 2004
Submit Draft Final Parcel F Validation Study Report	August 18, 2004
Submit Final Groundwater Monitoring Sampling & Analysis Plan (basewide)	August 20, 2004
BCT meeting	August 25, 2004
RAB meeting	August 26, 2004
Submit Final HRA Volume II with RTCs	August 31, 2004
Submit July 2004 Monthly Landfill Gas Monitoring Report	September 2, 2004
Submit Parcel E PCB Removal Action Memorandum	September 7, 2004
Submit Parcel E Standard Data Gaps Summary Report	September 8, 2004
Submit Parcel B Draft CSR Addendum	September 9, 2004
Submit Final ZVI Treatability Study Workplan for Building 272	September 13, 2004
Submit Parcel E Data Summary Report for Standard Data Gaps Investigation	September 15, 2004
Submit Final Parcel D TCRA Action Memorandum	September 17, 2004
Submit Data Package/Field Summary Report April-June for Basewide Groundwater Monitoring	September 20, 2004
Submit Parcel B Final January – March 2004 Quarterly Monitoring Report with RTCs	September 20, 2004

Activities Planned	Date
Submit Draft Summary Report for Dry Dock 4 Water Sampling Field Work	September 20, 2004
Submit Draft Parcel B April – June 2004 Quarterly Monitoring Report	September 20, 2004
Submit Parcel E IR-02 Removal Action Workplan	September 21, 2004
Submit Parcel E PCB Removal Action Workplan	September 21, 2004
BCT Meeting	September 22, 2004
RAB Meeting	September 23, 2004
Submit Parcel D Final Workplan for Time Critical Removal Action w/RTCs	September 24, 2004
Submit August 2004 Monthly Landfill Gas Monitoring Report	September 30, 2004
Submit Landfill Storm Water Discharge Management Plan (rev 2)	September 30, 2004

Note:

\* Document submittal pending receipt and/or resolution of BCT comments

### 3.0 OTHER

- The Navy submitted the draft final Parcel A Finding of Suitability to Transfer (FOST), Revision 2 on March 19, 2004. Additional radiological surveys were completed at Building 322. The structure and slab foundation at Building 322 were removed during the week of June 21, 2004. Soil beneath the slab was then surveyed and a Final Status Survey Report is in preparation. The Navy is planning to submit the draft final FOST, Revision 3 in August 2004.



**HPS Membership/Bylaws & Community Outreach (MBCO)  
Restoration Advisory Board (RAB) Subcommittee  
Meeting Minutes for 11 August 2004  
6:30-8:00 p.m.**

**Window on the Shipyard Office**

The MBCO RAB subcommittee meeting held on August 11, 2004 was called to order by Melita Rines, RAB member and Subcommittee Leader. The subcommittee meeting took place at the Window on the Shipyard Office from 6:30 to 8:00 p.m.

MBCO Subcommittee attendees: RAB Members- Melita Rines and Keith Tisdell, Jesse Mason, Environmental Protection Agency (EPA) - Jackie Lane, SulTech - Carolyn Hunter, Window on the Shipyard – Lea Loizos , Young Community Developer - Michele Brown.

**SAN FRANCISCO REDEVELOPMENT AGENCY (SFRA) UPDATE**

Nicole Franklin (SFRA) was not present for the MBCO subcommittee meeting, therefore was unable to provide an update. It was recommended that an action item be created to contact Ms. Franklin for an update on the SFRA action items from the July 2004 MBCO subcommittee meeting. Ms. Rines will invite Ms. Franklin to attend the September 2004 MBCO meeting to provide updates on to following items:

**July 11, 2004 MBCO Subcommittee Meeting Outstanding SFRA Action Items**

1. Once SFPD agrees with the term sheet for the sublease of Building 606, they will present it to the MBCO subcommittee for review.
2. Community members who witness police activity on Parcel A should contact Capt. Dudley as soon as possible at (415) 671-3150 so that he can send someone out to the site to investigate.
3. Ms. Franklin and Captain Dudley agreed to go back to SFRA and SFPD to gain clarification on the agreement made regarding activity on Parcel A. During the next MBCO subcommittee meeting SFRA will report back their findings and future steps SFPD will take in order to address the communities concern about activity on Parcel A.
4. Ms. Franklin will coordinate a meeting to discuss speeding issues on Innes Avenue with Mr. Capobres and invite interested community members to attend.

**SAN FRANCISCO POLICE DEPARTMENT (SFPD) UPDATE**

Keith Tisdell discussed the past SFPD activity on Parcel A and that unless the residents on the hill know that SFPD is not allowed to be on Parcel A they will not call Captain Pardini to inform him of activity. Ms. Rines stated that Ms. Franklin agreed to discuss Parcel A activity with SFPD and will get clarification on their understanding with the Navy and the community on Parcel A availability. An update on these items will be given by Ms. Franklin to the MBCO subcommittee.

**RAB APPLICATION REVIEW/UPDATE**

The MBCO subcommittee discussed clarifying the conditions for membership section of the RAB application. The subcommittee agreed to bold the area which speaks to “an alternate’s participation not counting to RAB member’s attendance” on the application.

The address on the RAB application should be changed to the SulTech address for processing. Ms. Hunter agreed to make all changes to the RAB application and submit it to the MBCO subcommittee during the September 2004 meeting.

## **RAB BYLAWS ADDITIONS/CHANGES**

The MBCO subcommittee discussed adding an amendment to the operating procedures section of the RAB bylaws. The new RAB applicants must appear in front the MBCO subcommittee prior to being voted onto the board.

Renewing RAB members must fill out an application but do not have to appear in front of the MBCO subcommittee prior to being voted back onto the board. If a RAB member has reapplied more than once after removal due to absences, a letter explaining their renewed dedication to the board must be submitted with the second reapplication. .

The MBCO subcommittee discussed that for #17 of the by-laws, all “shoulds” need to be changed to “shalls”.

The group agreed that if an issue comes up that is not covered by the RAB bylaws, that an arbitrator will elected to facilitate the concern.

Ms. Rines reminded the group that the RAB Bylaw revisions will be voted on during the August RAB meeting and will go into effect in September. In order to make sure everyone starts with the same attendance rules, the entire RAB will begin with a clean attendance slate in September 2004.

**Subcommittee Chair Responsibilities:** The MBCO subcommittee discussed the duration of the chairs of the subcommittees. It was agreed that each subcommittee chair will serve a one year period. A subcommittee chair election will take place each June in conjunction with the election of the RAB co-chair

## **ADDITIONAL AGENDA ITEMS**

**MBCO Mission Statement:** The subcommittee discussed creating a MBCO mission statement. The following mission statement was developed for the MBCO subcommittee:

*The HPS RAB MBCO Subcommittee was developed to maintain a full RAB membership and update the RAB Bylaws as necessary. The MBCO Subcommittee will assist the Navy in their community outreach program by providing input on community involvement plan activities there by insuring the effectiveness of the current community outreach program.*

## **Next MBCO Subcommittee Meeting**

September 15, 2004; 6:30 – 8:00 p.m. at the Anna Waden Library

## **September MBCO Agenda Items**

- RAB Operating Procedures
- SFRA/SFPD Updates (from previous action items)

### **MB CO SUBCOMMITTEE AUGUST 2004 ACTION ITEMS**

1. Ms. Rines will contact Ms. Franklin and invite her to the September MBCO subcommittee meeting
2. RAB applicants must appear in front of the MBCO Subcommittee prior to be voted on by the entire board. RAB members reapplying for the RAB for a first time do not need to appear in front of the MBCO subcommittee. RAB members who are reapplying for a second time must provide a letter of intention as well as appear in front of the MBCO subcommittee prior to be voted back onto the board.
3. Ms. Hunter will make all changes discussed during the MBCO subcommittee meeting on the RAB application and provide it for approval at the September meeting.

## Abbreviated Minutes

Lowman Radiological and Risk Assessment Subcommittee HPS Restoration Advisory Board

Wednesday, July 21, 2004 3-5pm Green House 4919 Third Street

Attendance: Willie Ratcliff- host, Dr. Ahimsa Sumchai - Chair, Francisco DaCosta- EJA, Michael Work-EPA, Jackie Lane - EPA, Lea Loizos - Arc Ecology, Ralph Pearce-Navy, Dan Stracka-EPA, Maurice Campbell-CFC, Pat Brooks-Navy

The meeting was called to order at 3:15pm. Dr. Dan Stracka, a Ph.D in biochemistry with the EPA's Superfund Division began the discussion with a comprehensive review of manganese at HPS and the on-going controversy over the PRG's set by the EPA for a substance present at the shipyard in abundance that is both ambient and the product of industrial activities. Manganese is used in the ship building industry to strengthen steel. It is also naturally occurring in the crystalline matrix of the rock used as fill for the shipyards working pad. Previous reports on ambient manganese at HPS have identified that beginning in the 1940's, large volumes of basalt, Chert and sandstone were removed from Hunters Point and used as fill material to create extensive areas of land from what was formerly San Francisco Bay. With respect to the issue of "background" versus "ambient", until 50 to 60 years ago, the surface of most of what is now Hunters Point Shipyard was water. Since most of the shipyard was created from fill material during the 1940's, the environmental science concept of background has been used synonymously with ambient.

Michael Work voiced community concerns that the PRG's set for manganese may not reflect the impact on ethnically diverse populations. RAB member Raymond Tompkins has cited evidence that manganese may have more potent effects on persons with melanin in their skin. Dr. Stracka stated that the health based clean up standards have been derived from "the most sensitive populations....manganese levels in drinking water were set for children". Manganese in drinking water poses its greatest toxic threat to infants whose formula is mixed with water. The discussion focused on cumulative and additive effects with other known toxins including lead and iron.

Dr. Stracka stated additional research has come from animal studies using both male and female animals. Human data has also come from adult mine workers in South Africa exposed via the inhalation route. They are presumably Black and exposed to more potent concentrations of manganese in soil and rock. Studies have also come from male and female subjects in Greece where manganese has been found in high concentration in water.

Dr. Sumchai asked how it was possible to differentiate between manganese that is "naturally occurring" and that present as a result of the extensive industrial activities at HPS without some form of "fingerprinting". Dr. Stracka stated the depth of soil the manganese was found in helped to interpret high levels. Dr. Sumchai read from the

March 28, 2002 RAB presentation titled Pre-Final ESD for Parcel B an Evaluation of Ambient manganese. The author received a TAG grant from Arc Ecology and identified his source of health effects information as Toxicological Profile for Manganese Draft for Public Comment, ATSDR, 1997 and the Concise International Chemical Assessment Document, WHO 1999. It identifies that manganese enters the environment as a result of industrial processes such as iron and steel manufacturing, from power plants and from the burning of fossil fuels. A manganese compound MMT is used as an anti-knock fule additive in unleaded gasoline. The US EPA banned MMT but the ban was lifted in 1995. The author concluded that the manganese contained in chert and basalt does not pose a health hazard to the public because it is locked into the crystalline matrix of the rock. While the author agreed with the Navy's contention that manganese should be dropped as a chemical of potential concern his recommendations do not support residential development in areas of high manganese.

Francisco DaCosta stated the Navy has "not taken responsibility in conducting empirical studies on our children" of the health effects of HPS toxins and referenced studies done on miners in Japan. A discussion of the health effects of manganese ensued and Dr. Sumchai read from the extensive listing of health effects - primarily neurological and pulmonary- described for manganese. The attendees agreed that an analysis of the literature on health effects would be warranted and it was suggested and adopted by consensus that Dr. Stracka be invited to address the full RAB on this matter and that the available literature be reviewed prior to his presentation.

Michael Work of the EPA emphasized that the role of the Superfund division of the EPA was in the establishment of "proper clean us standards" for toxins at HPS but agreed that the manganese debate remained open. Dr. Sumchai described some of the advancements in biomonitoring and the political progress made in the implementation of toxic registries and the "fingerprinting" of toxins like PCB's.

Maurice Campbell, RAB community co-chair suggested that the subject be continued as a future RAB presentation and closed the meeting with an update on the D series buildings RASO is investigating. Pat Brooks and Dr. Sumchai exchanged concerns about the changing "background radiation levels at HPS". Dr. Sumchai asked about the status of the Parcel B RI Report and HHRA. Mr. Brooks stated the overall cleanup goal is to clean up to 1 1/2 to 2X background. The Parcel B update states "continued evaluation of human health and ecological risk assessment methodologies. Continued preparation of technical memorandum to support the record of decision amendment. (TMSRA).

It was agreed to table discussions regarding Parcel B Building 103 and the Radiological Removal Action Action Report for the next meeting. Additionally the HRA response to comments will be reviewed and the analysis of findings at Building 322 will be reviewed.

The next meeting will be held on Wednesday, August 25 from 3-5pm at the Green House. Mr. Clifton Smith has been invited to prepare an independent analysis of the Building 322 survey and discussions have been held with him regarding an independent

survey and TAPP grant to establish background radiation level averages at HPS and a reference background radiation average for scientific comparison in the City and County of San Francisco.

Respectfully submitted,

Dr. Ahimsa Porter Sumchai

**Technical Review Subcommittee**  
**August 18, 2004 Meeting Summary**  
**Topic: Preparing for the Parcel B ROD Amendment**

Attendees: Lea Loizos, Clifton Smith (TAG contractor)

The purpose of the meeting was to begin preparing for the upcoming *Parcel B Technical Memorandum in Support of a ROD Amendment* (TMSRA), which is scheduled for release at the beginning of next year. Specifically, the meeting focused on the issue of ambient metals in Parcel B soil, particularly manganese. The goal of the meeting was to develop a plan that will lead to an informed opinion by the subcommittee on the “ambient” manganese issue.

To help focus the discussion, the following list of questions was developed at the beginning of the meeting as questions that eventually need to be answered in order for the subcommittee to form an opinion on the issue:

1. Are elevated levels of manganese (Mn) truly ubiquitous in Parcel B soils?
2. What is the distribution of Mn? What percentage of samples shows Mn above the Hunters Point Ambient Level (HPAL)? Above the Preliminary Remediation Goal (PRG)?  
[Mn PRG for residential soil = 1800 mg/kg; HPAL for Mn = 1430 mg/kg]
3. Are there hot spots that can be identified? If so, is their removal feasible and will it significantly reduce the overall health risk?
4. Are there previous site uses that might be attributable for some of the elevated areas of Mn?

We then conducted a brief review of relevant documents and materials that focus on Parcel B and the manganese concentrations in the soil to determine if we had enough information available to us to answer these questions. Judging by the data and maps available to us, there are large areas of Parcel B that have never been sampled, making it difficult to estimate the distribution of manganese over the entire parcel. To help us develop an informed opinion on the ambient manganese issue, we came up with the following list of requests:

- The Technical Review Subcommittee is requesting a copy of the BCT’s comments on the Construction Summary Report that was released in 2002. We believe a review of these comments will be helpful for the subcommittee to gain a better understanding of the existing data gaps and the regulators’ remaining concerns with Parcel B.
- The subcommittee found that the manganese data for Parcel B was split up between many different documents. We are requesting that the Navy provide us with a current figure that shows all of the sampling points and the Mn concentrations at those points, including the depth of the sample. If this figure already exists, please direct us to the proper document.
- To continue our work on the manganese issue, we are requesting that the Navy attend an upcoming technical review subcommittee meeting to discuss metals at

HPS, specifically Parcel B. We would like for the Navy to come prepared with the following information:

- The Navy's definition of ambient vs. background
  - Maps showing the distribution of metals in Parcel B, including where and when the samples were taken, whether samples were taken before or after excavation, in what medium the samples were taken, and the levels detected.
  - The Navy's position on metals in the ROD, in subsequent ESD's, and currently in the TMSRA.
- Lastly, the subcommittee would like to know where we can find complete characterization data - post remedial actions - for the entire parcel. Can the Navy provide us with the electronic database for Parcel B prior to release of the TMSRA?

Submitted August 25<sup>th</sup>, 2004

By Lea Loizos, Technical Review Subcommittee Chairperson



## **DRAFT PROPOSED BYLAWS**

### **HUNTERS POINT NAVAL SHIPYARD RESTORATION ADVISORY BOARD**

1. Purpose and Scope. The purpose of the Restoration Advisory Board (RAB) is to review, comment, and make recommendations to the Base Realignment and Closure (BRAC) Cleanup Team (BCT) on matters pertaining to the restoration and environmental cleanup of Hunters Point Naval Shipyard. In addition, the RAB should act as a forum for information exchange between the installation, affected community, Department of Defense (DOD), reuse groups, and regulatory agencies. The RAB shall be conducted in accordance with all applicable DOD and Environmental Protection Agency (EPA) guidelines.

Each member of the RAB is encouraged to provide comments, suggestions, and recommendations and participate in open discussion about all environmental issues related to the cleanup of Hunters Point Shipyard.

2. Regular Meetings of the RAB. The RAB will meet once a month at a regularly scheduled day and time selected by the RAB members. The public shall be notified of the date, time, and location as provided by applicable law.
3. Special Meetings of the RAB. Special meetings of the RAB may be called at any time by the co-chairs or a majority of the members of the RAB by oral or written notice to each member of the RAB and to any other entity or person legally required to receive notice of RAB meetings. Notice shall be received at least 24 hours before the time of the meeting, and the notice shall include the date, time, and place of the meeting and the business to be transacted. If the special meeting is to occur at a location other than the regular meeting location, a 15-day notice of the special meeting will be required. Special meetings should be announced at the regular RAB meetings, in public notices, or other related flyers to one of the three appropriate site mailing lists below:
  - A. RAB Members Only
  - B. RAB Information Distribution List
  - C. Interested Community Distribution List.
4. Quorum. A quorum for the transaction of official business at regular and special meetings of the RAB shall be considered present if at least one-third of the community RAB members are in attendance.
5. Voting. The community RAB members, or a designated alternate, may vote on any issues of concern to the RAB. The community RAB member, or alternate, must be present for the vote. A majority vote of the members present at a meeting is required for passage of any motion. No absentee ballots will be accepted.

The following general process will be followed:

- A. A motion must be made and seconded by a RAB member, or their alternate
- B. The RAB members will hold discussion on the matter
- C. The community will be afforded a reasonable amount of time to add comment on the matter, if requested

D. The motion will be put forth for a vote by the RAB members, or alternates

6. Open and Public Meetings. All meetings of the RAB shall be open and public, and all persons shall be permitted to attend any meeting of the RAB or its subcommittees, including special meetings.
7. Attendance by Governmental Agency Representatives and Members Designated by Government Agencies. All RAB members are expected to attend regular meetings. Although the RAB has no power to force government agency representatives or members designated by government agencies to attend the meetings, the RAB may write letters to the respective agency to encourage their participation or request that their appointed representatives be replaced.
8. Attendance by RAB Members. All RAB members are expected to attend regular meetings. If any member is absent from four meetings in a 12-month period he or she will be automatically removed from the RAB. There will be no distinction between excused and unexcused absences. For purposes of attendance record-keeping, a 12-month period will be defined as 12 months from the month of the current RAB meeting.

Each member may designate an alternate to attend in his or her place. An alternate has all the privileges of a RAB member but does not count towards attendance.

9. Responsibilities of Community RAB Members. Community RAB members represent a vital component in the cleanup program and they have a direct responsibility to represent the interests and concerns of their community. Responsibilities of Community RAB members include:
  - a. Making a good-faith effort to regularly attend RAB meetings, committee meetings, training sessions, site tours, and participation in reviewing the Hunters Point Shipyard environmental cleanup program.
  - b. Giving advice and comment on the cleanup effort and environmental restoration program.
  - c. Regularly reporting back to the community that they represent. Members are responsible for soliciting comment and opinion from their community on cleanup issues.
  - d. Providing for the distribution of environmental cleanup information to and from the community they represent.
  - e. Reviewing and providing comments on documents related to the cleanup effort at Hunters Point Shipyard.
  - f. Community RAB Members may not represent the RAB before any person, agency, organization, press, or the public without prior authorization from the full RAB. This provision does not apply to the RAB Co-chairs, who are duly authorized to do so.
10. Term of Office. Each community member will serve an initial two-year term. Elections for new members or reappointment of existing members will be held the meeting following receipt of a member application or reappointment date. All appointees to

vacant seats will serve out the term of that seat. Community members may remain indefinitely to their seat on the RAB.

11. Minutes. Minutes of each meeting of the RAB shall be recorded by the Navy as a summary of the meeting. A copy of the minutes shall be furnished to each RAB member within 7 days prior to the next meeting. Minutes of subcommittee meetings may be approved and incorporated into RAB meeting minutes. RAB members shall review, comment, and approve minutes at the next regular meeting of the RAB. A verbatim transcript of the meetings will also be prepared by the Navy.
12. Resignations. A member of the RAB may resign by giving notice in writing.
13. Membership Selection Criteria. The membership subcommittee or entire RAB membership will use, at a minimum, the following criteria for selecting RAB members. Additional criteria may be established at any time by the membership subcommittee or the entire RAB.

Members will be evaluated for:

1. Willingness to meet the purpose of the RAB (as stated in item #1 of these Bylaws)
2. Ability to work effectively and cooperatively with other RAB members
3. Ability to make a positive contribution to the RAB
4. Ability to serve a two-year term

In addition, when reviewing applications for the RAB, the membership subcommittee will strive to select representatives from the following types of organizations or individuals with qualities mentioned below:

Type	Number of Seats
Environmental Organizations	Balanced
Local Businesses	Balanced
Community-based Non-profit Organizations	Balanced
Residents at-large	Balanced
	Total membership = 30

The number of organizational seats should be used as guidance not a rule. If the membership subcommittee or entire RAB is unable to find organizations to fill some of these seats, then individuals who meet the first four criteria, should be appointed to the RAB as individual members.

In addition to these categories, three community organizations have permanent seats on the RAB because they are designated by government agencies, so long as their designation remains:

- The Mayor's Hunters Point Shipyard Citizens Advisory Committee (CAC)
- The Bayview Hunters Point Project Area Committee (PAC)
- U.S. EPA's Technical Assistance Grant Recipient

14. Filling Vacancies. A vacancy is defined as a seat 1) that has never been filled, or 2) from which a RAB member has officially resigned, or 3) that has been vacated because the member has missed four meetings in a 12-month period, as defined under the section on attendance.

The membership subcommittee, or in its absence, the entire RAB, will review all RAB member applications. If no suitable applications are on file, then new applications will be solicited by placing advertisements in the local newspaper and in Navy publications. In addition, announcement of RAB openings will be made at the RAB meetings and at the Mayor's Hunters Point Shipyard Citizens Advisory Committee meetings. The membership subcommittee, or entire RAB, will submit its recommendations for new members to the full RAB for discussion and vote. Renewing RAB members are required to fill out a new application within 30 days after the expiration of their term. Renewing RAB members are not required to attend a membership subcommittee meeting prior to being approved. Only new applicants are required to attend a membership subcommittee meeting prior to coming before the full RAB board for elections. The membership application will reflect the distinction between the renewing member and the new applicant. Membership applications are available on the Hunters Point section of the Navy's web page at <http://www.efdswnavfac.navy.mil/Environmental/HuntersPoint.htm>.

15. Election of Community Co-chair. The Community Co-chair shall serve a term of one year from July 1 to June 30. Prior to the expiration of the Community Co-chair term, the RAB will announce the availability of the co-chair position. Interested RAB members will have the opportunity to 'self nominate' or nominate a member of the RAB for the co-chair position. At the first regular meeting of the RAB prior to the Community Co-chair term expiration all community members of the RAB shall elect a co-chair. The Community Co-chair may be re-elected indefinitely. If the Community Co-chair resigns or loses their seat, a new co-chair will be elected and will finish out the term and then have to run for re-election.

16. Duties of Navy and Community Co-chairs. The Navy and Community Co-chairs shall preside over all meetings of the RAB. When either co-chairs are absent, their alternates designated by the respective co-chair may lead the RAB meeting. The co-chairs may authorize RAB representatives to attend meetings and hearings for the purpose of representing the RAB. The co-chairs are responsible for preparing and soliciting input for the agenda as well as assuring that the concerns of the community are heard and recorded and that the RAB's comments and/or recommendations are forwarded to the BRAC Cleanup Team and Navy for incorporation within the decision-making process at Hunters Point Shipyard.

17. Subcommittees. Subcommittees shall be established by a vote of the RAB. Each subcommittee shall elect a subcommittee chairperson, who shall be a RAB representative. Subcommittees shall set up a Mission Statement and develop operating procedures. Members of the public may sit on and participate in any subcommittee.

Ad hoc subcommittees may be created for a short-term basis to resolve short-term issues. Continuance of an ad hoc subcommittee beyond an initial 12 month period may be reviewed by the RAB on a case-by-case basis.

Subcommittees shall prepare meeting minutes to reflect a summary of the meeting. Minutes shall be distributed to the RAB at the following RAB meeting or in a timely manner. General attendance at subcommittees shall be taken and recorded in the minutes. Based on review of subcommittee attendance records, a determination will be made by the RAB to suggest a change in meeting frequency, merging with existing subcommittees, or dissolution.

18. Amendments. Once per year, amendments to the Bylaws shall be brought before the full RAB for referral to the Membership/Bylaws subcommittee. Membership/Bylaws subcommittee will make recommendations, after review, and then resubmit to the full RAB at the September RAB meeting for a vote. Amendments to these Bylaws require a majority vote at the September RAB meeting. Written notice of the amendments and their terms must be given at least one week prior to the meeting.
19. Parliamentary Authority. Matters not covered by these Bylaws shall be governed on a case-by-case basis at the discretion of the Arbitrator. Arbitrator shall be elected to serve a one-year term from January to January in order to cover the election of the Chair position.
20. Rules of Conduct. All RAB members and members of the public are encouraged to express their opinion on any matter of consideration before the RAB. In the interest of trying to conduct the meetings within a reasonable time frame, each agenda item will be discussed among the RAB members first and then the public will be allowed time to comment. The Chair may limit the time allotted for public comment.

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